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Farming for Women

By E. L. VINCENT

CAN a woman succeed at farming? This is the question we hear asked every day, and we menfolks, who know how hard the work is, and how closely we must figure to make things come out the right way, are sometimes inclined to doubt it, and say, "No; women have no business trying to run farms."

Yet women do run their own farms, and often succeed where men would fail. I have in mind one such woman. She was left a widow, with a farm of sixty acres. She had one son, who was about fourteen years old at his father's death. An aged father-in-law, who possessed about one hundred acres more, had his home with them. His farm had been rented a number of years, and had become badly injured. Here was a problem for the widow. Should she rent her farm, and see everything go down, as she believed would be the case, or should she keep things in her own hands, and by hiring some and working what she could herself, try to get along that way?

She decided to be her own farmer. Her son was a good boy, steady and faithful as a clock. Although herself a woman of limited strength and easily affected by changes of the weather, she bravely took up with her son the burden of the farm. Little by little she worked up a good dairy. She helped to milk, and to feed the calves and the pigs. She directed everything with an ability that might well put some of the rest of us to shame. She cared for her own milk, and made the butter with her own hands. She and the son marketed it all, and also the rest of the farm produce, in a city which was ten miles distant from the farm. She did all these things so well that the books showed a balance on the right side at the end of the year.

To still further complicate matters, the old father-in-law died, and she took upon herself the management of the farm he left to her son as next of kin. But the hardest blow of all was when the son, now nineteen years of age, was taken away, leaving her all alone to fight out the fierce battle. For a time she staggered, and came very near going down; but even under this severe trial she bore up, and bravely went on.

To-day this lone widow carries on her work alone. She does it successfully, too. She has seven or eight good cows. At the present time she sends the milk away to a creamery, but a great part of the time she makes the butter herself. She has a fine flock of sheep, and the lambs raised last spring she sold at an average of three dollars and fifty cents, which was more than any of her neighbors received. She is out at the barn every day, and it does not seem as if the exposure to which she has been subjected has made her any weaker physically than when she began her work. Her crops are attended to promptly and in season. Her cows are put into the barn for milking at exactly the same time every day. They are let out in winter for watering and exercise with the same regularity, and she personally attends to feeding all the stock.

Now, it must be admitted that here is a woman of rare executive ability. That is true. Where she has succeeded many would fail, but it does establish the fact that women can succeed as farmers. If this frail woman could win out so grandly, could not scores more who are sound in body? Surely they could.

Hints on Winter Manuring

The question of fertility is the most live problem with which the ambitious farmer has to deal, and now that the commercial-manure boom has subsided to its true relation as an emergency or assistant plant-food, the disposal of the farm-made manure is more than ever becoming a criterion by which to judge the man behind the farm gun.

It is not supposed that the thinking farmer now allows his manure to waste from the eaves drainage, or streams to carry its strength from his stable-yards, but there are other sources of waste at work, which are often not sufficiently considered after the manure has reached the fields. Winter hauling and spreading are widely practised because of the saving of labor to both men and teams. The difference in exertion between throwing a dozen tons or so daily into a low sleigh or a high wagon or spreader is appreciated by the loader. So, too, with the team, which is improved by the winter employment, and can handle two tons or upward easier on frozen ground than one third that amount during the soft spring season.

The principal objection to winter manuring is the danger of excessive waste of fertility. The frozen, ice-incrusted ground, that makes the moving and spreading of the manure so expeditious, in like manner promotes its leaching and waste when the dashing winter rains come. A newly spread field will often be seen to discolor a stream of considerable size, carrying with it the fertility elements which are most available and valuable.

The writer has found it possible during most winters to obtain the benefits of winter hauling and escape largely the tendency of leaching by delaying the hauling until after the "back" of winter is broken. Almost invariably in the colder latitudes there is a period lasting for a week or longer late in February when the nights are frosty and the days clear and sunshiny, making ideal weather for hauling manure. At this time, too, the snow is apt to be solid and supporting, but yet porous and well adapted to absorbing the drainage from manure should rains come. Moreover, the soil underneath has usually become thawed to a considerable extent by the covering of snow, thus allowing the manure, as the wasting of the snow progresses, to become disintegrated and incorporated into the soil without the loss that is liable to occur when the fields are ice-locked earlier in the winter. As spring approaches, teams and men are in need of just such muscular but intermittent exercise to gradually harden them for the spring campaign, when to be soft and flabby in muscle and unfit in mind means a money loss for the entire season. B. F. W. THORPE.

A FARM SCENE ON LAKE CHAMPLAIN

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Mr. Greiner Says:

BELGIAN-HARE MEAT.—I have always taken a safe middle ground in regard to the Belgian hare. I have not been carried away by the craze of a few years ago, nor joined those who did not want to "leave a good hair" on the hare. There was no doubt in my mind that the Belgian hare would finally find the true level of its worth as a meat-producing animal. One of the agricultural weeklies which used to decry the Belgian hare in unmeasured terms, and could see no good in it either as a pet or as meat stock, now quotes from the "Butchers' Advocate" as follows: "The hare is now taking its place largely as a meat-producing animal, although the stories told about it are greatly exaggerated. But there is a small, and possibly growing, demand for the meat, which is of high quality. The hares attain market size at about six months of age, but make good eating at four months old." I cannot indorse too strongly the characterization of the hare-meat as "of high quality."

APPLE-JUICE AS A MEDICAL AGENT.—The big apple crop which we harvested last October and November has been a big lift to us, and a blessing in more than one way. It made a lot of work for people; it made the coopers busy and happy, and gave them a big lift, too; it puts us in the way of having good fruit to eat with our meals right along, making us feel better physically, and more independent than otherwise of physicians' services, and finally, it has given us a lot of wholesome apple-juice for use—fresh as a beverage and medicine, and fermented as first-class vinegar, doing away with all the risks found in the use of store-vinegar, which may be cider vinegar, or more likely, diluted poisonous acid. I like to make at least a portion of my cider very late—just at the beginning of steady freezing weather. A barrel of it kept on tap in some outbuilding or under a shed will furnish us the sweet apple-juice during a good share of the winter, and until it freezes up so that we can't get it to flow any more. Constipation is our regular winter trouble unless headed off by the same means which keep us free from it in the summer-time—namely, a diet in which vegetables and fruit-acids form a considerable part. Overindulgence in meat and potatoes almost invariably leads to a clogging of the bowels. A glass of sweet apple-juice taken just before meals, or even at other times, is a sure and safe cathartic, keeping the bowels open naturally, and also keeping the kidneys in good working order. And when all the wastes of the system are promptly eliminated, poisonous matter is expelled before it can do harm.

THE ONION CROP.—A recent estimate places the aggregate production of onions in the United States for 1903 at about three million bushels. This is slightly less than the number of bushels grown in 1901, and nearly a million bushels less than the crop in 1902. It indicates a present slight shortage, to put it mildly, and explains the increase in the importation of onions from nearly seven hundred and fifty thousand bushels in 1901 to nearly eight hundred thousand bushels in 1902, and probably over nine hundred thousand bushels in 1903. If all these figures are even approximately correct, they are significant, and possibly instructive, to the American onion-producer. They show that one bushel in every three or four bushels of onions consumed by the American people comes from abroad, and as the foreign onions usually sell for at least twice the amount of money that the home-grown common onions bring, it also indicates that the American consumer spends nearly as much money for Spanish and other imported onions as for the American-grown product. If we have any tears to shed, the contemplation of this unsatisfactory onion business should bring them out. I do not concede that the imported onion (Spanish or otherwise) has any peculiarly high flavor or "bouquet," or any superior mildness, sweetness or tenderness, not possessed by some of our own American-grown onions of the Spanish type, especially the Gibraltar and the Prizetaker. We have the soil, the climate and all the facilities for growing onions that are not a whit inferior to the best imported bulbs. The "new onion culture" makes the production of large Prizetaker and Gibraltar onions sure and comparatively easy, and all that is needed is for the American grower to take hold with more energy, and put the home-grown product before the American consumer and middleman.

COMMERCIAL CANNERIES.—A reader in Mississippi writes that the people in his vicinity wish to start a canning-plant, principally for tomatoes, and asks a series of questions concerning the cost of such an undertaking, about dealers in canners' supplies, etc. Such questions have been asked a number of times, and I am glad to be able to tell where all the needed information can be had from reliable hands. The Department of Agriculture of Pennsylvania has recently issued Bulletin No. 91, which treats on the canning of fruits and vegetables. A copy can probably be had by non-residents on payment of a nominal sum. Address the Department of Agriculture, Harrisburg, Pa. The subject, however, seems to be of so much general interest that I will give a few quotations: "The nature of the canned goods is such that the management of the business of the factory is most successfully conducted when it is reposed in one responsible head. The person chosen may represent a company, but he should be possessed of such business traits that all confidence may be placed in his ability to buy materials and sell goods. He must have in his employ a 'processor' whose experience will bespeak a successful pack. Such men are paid from fifty to one hundred and fifty dollars a month, according to their qualifications. The work of the processor requires the greatest amount of skill, and while formerly a great degree of mystery was thrown about this work to guard the 'secrets' of canning, it is now well known that there are no secrets except where the use of preservatives forbidden by law is practised. Canners have learned that it is better for them to throw open their factories to visitors, permit the closest inspection of all their operations, and disclaim any secrets, and thus retain the confidence of the people in the cleanness, wholesomeness and purity of the foods they put up. No person can steal a processor's skill by a visit to his factory, nor can one equal the capper's speed by watching him at his work." It seems to me, therefore, that the first thing the people of a vicinity should do when they wish to put up a coöperative canning-plant is to engage the services of an expert to lay out the plant, buy the machinery and supplies, etc. It would not be safe to go ahead in any other way. It should be kept in mind that canned goods are not any more an article of luxury, or for the wealthier people only, but that they have become a necessary food-supply of the great masses, and are now found as commonly on the tables of the ordinary wage-earners as any other ordinary food-supply. The prices have come down to those of ordinary food products, and the competition is formidable. The canned article must be first-class, or it will not sell. One of my grocers told me that a few days ago a leading dealer in canned goods was advised by the canner that owing to a defective thermometer one lot of sweet corn had been put up in poor shape, and had been scattered through the trade over a wide territory. The agents of that firm went through the shelves of every grocery to which their goods had been sold, examining that particular brand of sweet corn, trying to discover and sort out all the spoiled lot. It cost that firm a lot of money and trouble, but they desired to protect their reputation and future trade.

CAPITAL REQUIRED FOR CANNERY.—Again I quote from Bulletin No. 91 (Pennsylvania): "The capital necessary to properly conduct a canning business may be much or little, according to the capacity of the factory and the variety of the goods to be canned. There have been remarkable financial successes in this business, but equally remarkable failures, also, and the latter have frequently been attributed to insufficient capital, forcing the sale of the entire stock of goods when the market price is low. With sufficient capital to carry the larger part of the stock until there is a real demand for it, a fair profit will be realized, and dividends may be declared. For instance, a small factory for canning tomatoes, with a capacity of two thousand cans a day, may put up eighty thousand cans by operating forty days. It will have a building and outfit of machinery and tools costing about seven hundred dollars. The cans will cost sixteen hundred dollars, the tomatoes one thousand dollars, and the skilled and unskilled labor for forty days will cost six hundred and fifty dollars, sundry items of expense fifty dollars, making a total of four thousand dollars. If such a concern is capitalized at two thousand dollars, with the expectation of making quick sales to pay for materials consumed, it may be forced to sell the entire pack at almost cost to meet its obligations, and then find no profit in the investment; but with a capital of three thousand dollars, or better four thousand dollars, labor may be promptly paid, the farmer will be made happy with his cash, and all materials will be paid for at cash prices. The canner is then independent with his pack, and can wait for a market that will pay him a profit of ten, fifteen, or even twenty, cents on a dozen cans of his tomatoes, and he has realized from twenty to thirty per cent upon his investment and owns his factory clear of debt. . . . The small canning-factories putting up a limited quantity of but one line of goods are better able than a large factory to give the closest attention to details, and thus can insure an excellent quality in what they pack."

Mr. Grundy Says:

FEEDING-STUFFS.—One of the most useful experiment-station bulletins I know of is that recently issued by the Rhode Island College of Agriculture. It is No. 94, and is entitled "Commercial Feeding-Stuffs." It is made up principally of analyses of commercial feeding-stuffs. Every farmer who buys or is thinking of buying commercial feeds of any sort should read this bulletin. It will open his eyes to the fact that in nine cases out of ten he is paying or will pay from fifty to ninety per cent more for them than they are actually worth. The medicinal properties contained in the so-called condimental foods are so small that they are not worth considering. One of the leading poultry-foods on the market is made up of ground wheat-screenings, charcoal and pepper. The charcoal and pepper are the "medicinal" qualities introduced to "tone up" the system of the fowls to which it is fed. For the amount of money required to buy fifty pounds of this poultry-food one can buy about twelve bushels of the raw material and mix it himself.

By wrong feeding a farmer sometimes gets his young pigs, calves or colts in bad condition. They do not grow or gain in weight, though they are chronically hungry, and eat ravenously of whatever is thrown to them. Or they may leave their feed, and ramble about, apparently seeking for something they crave. Young stock that is fed almost exclusively on corn is very apt to get into this condition. They are feverish, their skin is dry, and their hair rough and "staring." The experienced feeder would say that they need simply a change of food, but quite often the young feeder thinks that medicine or some "medicated" food is the thing to give them. What the animals really need is a different sort of food from that which is being supplied. I have seen such animals quickly recover and become thrifty and lively by being fed once a day with a mixture of equal parts of bran and middlings dampened with water sufficiently to just hold it together. Some good feeders think that the addition of a tablespoonful of black pepper and charcoal ground to a fine powder to each measured half-bushel, with about a teaspoonful of salt, is especially useful during the first ten days after the change of food. A neighbor of mine once gave a dollar apiece for five humped-up, starved-looking shotes at a sale. The crowd laughed at him, but he only smiled, and remarked, "Come around about forty days from now, fellows, and maybe I'll have something to show you that will do you good." He began feeding the shotes middlings and bran, equal measurements, mixed to a thick slop, with pepper, charcoal and salt, as mentioned above, and at the end of forty days he was the proud owner of five as nice, thrifty growing pigs as one would wish to look at.

ONE-HORSE FARMING—HOG-RAISING.—A boy farmer in the tide-water section of Virginia asks me a few rather hard questions. He says he has an interest in a hundred acres of land, and has been farming some of it two years, using one horse. I cannot understand why so many farmers in the South persist in trying to farm with one horse or mule and one-horse tools. One cannot turn the soil and pulverize it with a one-horse plow anything like as well as he can with a good two-horse plow. He cannot do anything with the soil half so well with one-horse tools as he can with two-horse tools, nor do it half so rapidly. If I were unable to keep two horses, I would hire one every time I wanted to plow, harrow or cultivate. It pays. You get the work done in less than half the time, and done more than twice as well. I would advise our young friend to get into the two-horse business as soon as possible. He desires to raise more hogs. I think it will pay him to do so. Probably the Berkshire or the Jersey Red would be the best for him. The Jersey Red appears to be a strong and vigorous breed, and as healthy as any I know anything about. The Berkshire is also a good breed, grows fast, and is easily fattened at any stage of its growth. The best is always the best, and always the cheapest. I would get a well-bred young sow, if I were unable to get more than one, for a starter, and I would have nothing on the place that is not pure-bred. The start will cost a little more than with common stock, but he will get it all back if he manages fairly well; and besides, he will take so much more pride in first-class stock that it will be a real pleasure to give them extra care and keep them in the finest condition. Get a pure breed, and stick to it. After a time one's name becomes connected with the breed, and when the breed is mentioned it calls to mind the fact that he is the owner of some very fine animals, and live men who are looking for good stock naturally go to him for it, knowing that he has it, and they expect to pay a good price for good animals.

As to what plants will furnish the most and best grazing for hogs in that section of the country I must confess that I am in the dark, because I do not know what kinds of grass or clover do well. If red clover succeeds, that is the stuff to grow. Cow-peas certainly grow well in that latitude, and I know of no better feed for both young pigs and fattening hogs when the peas begin to ripen. Simply turn them loose among the peas, and they will do the rest. For summer green feed there is nothing better than Evergreen sweet corn, and an immense quantity of it can be produced on an acre of rich soil. One thing he should be careful about, and that is to not overstock his farm. It is vastly better to have thirty hogs and a third more feed than they require than to have fifty and a third less than they should have. Thirty well-kept good pigs will make him more profit than double that number only half kept. I would advise him to get into communication with the Virginia Experiment Station, Blacksburg, Va., at the earliest moment possible, and get all their bulletins on this subject. They will not cost anything, and will give him a vast amount of information that he cannot well obtain elsewhere.

All Over the Farm

Farm Theory and Practice

PAYING FOR GOOD ROADS.—The value of a farm depends largely upon location. Whatever brings it nearer to the city, town or railway-station, measuring distance in time or in cost of transportation, adds to its value. Good roads are a means of shortening distance, and when they are built they add to the desirability of the land near them. A mud road is a long one, and a man prefers not to travel it day after day.

The agitation for good roads was needed. The bicycle people, especially the manufacturers, began it, and the automobile manufacturers are now the aggressive force. We farmers have needed the agitation, because naturally we are too much inclined to put up with any poor conditions to which we are accustomed. We have wasted much money in road-mending and road-building through ignorance and bad methods, and we have been too content with highways whose improvement was demanded by our own interests. The campaign of education in road-making that is now so energetic is doing a great amount of good.

But there is another side to the matter. It is easy to want things we cannot afford to pay for. The extent of public highways is enormous. A vast amount of the mileage is in sections in which the property does not have a value that justifies the building of costly roads through it. The man who owns a farm and farm home would enjoy a hard, dry, level road to town, but he may not be able to afford one. If one will make an estimate of the cost of making turnpikes of all the highways of our best agricultural states, he can quickly see how impossible the undertaking would be. Dirt roads must remain the highway for a great mass of farmers until the demand for farm products doubles the market value of land. The roads most traveled may be graded and curved with stone in our poorest counties, but the work must proceed in a conservative way if a great burden of debt is not incurred. The mileage of dirt roads must remain very great for a long time, and many people must rest content with them because they cannot afford the costly turnpikes.

I incline to think that the agitation for turnpikes at the expense of public indebtedness has gone far enough. In a few years debt-paying will probably be hard work. The agitation should rather be to cause discontent, not with dirt roads, but with the way in which they are kept. In a hundred years our population may be sufficiently dense to make land valuable enough to permit nearly every farmer to live on a stone road. An earth road is the best that can now be had for millions of people. The thing to do is to find the best way of keeping such roads. Improvement of dirt roads is the important question, or should be.

KEEPING WATER OFF THE ROAD.—It is water that makes a bad road-bed. If we could get the water away from a road we should not need a stone covering. The crowning of a road seems a natural thing to do—we want the water to run off; but as usually done it does not bring satisfaction, and then comes the demand for a rock covering, which the people are unable to pay for.

The crowning of a road, as usually done, and then the abandonment of further effort to keep the road good, often puts the highway into a condition nearly impassable during a portion of the year. We want to cause the water to run away, but the piling of loose earth into the middle of the road only holds the water there. There are two things to be done in making a dirt road a good road. One is to pack the loose earth thoroughly, and the other is to keep the surface smooth enough to let the water run off. It is entirely feasible to keep an earth road solid and dry at least eleven months out of each twelve by the right use of the roller and grader. All the material put into the crown of a road should be packed solid, and then the tracks made by wagon-wheels should be kept filled with grader or drag, so that water cannot stand and soak downward, and wagon-wheels will not continue to use a single track.

When a costly turnpike has been built, we understand the necessity of slight repairs as soon as needed to prevent cutting through the stone covering. When earth is the material for a road, and proper grading and crowning has been done, and drainage of side-ditches has been given, then provision should be made for keeping the road in good condition. With a roller and grader or suitable drag a supervisor can care for a big mileage of dirt road if funds are provided. The cost to the mile would be small in comparison with interest and repairs on a stone road. The filling of ruts as fast as they are formed, so that water cannot stand, and rolling when frost has softened the road-bed, would make most earth roads good the whole year. The action of frost would be greatly reduced if the water escaped to side-ditches by the constant filling of ruts. Such care of earth roads is not beyond the ability of all farming sections, and agitation to secure it would do more good than a longing for costly turnpikes where the cost is prohibitive. DAVID.

The "Corn-Wheat" Fake

Answering your inquiry, I am sorry to see that the Chicago "Record-Herald" has given new life to the fairy-tale about "corn-wheat." I had supposed that that ghost had been laid. Last year we were deluged with inquiries to such an extent that it was necessary to issue a circular-letter. Also the United States Department of Agriculture was so flooded with letters on the same subject that it was necessary to employ a special stenographer. It seems that this imaginary grain varied with the region. From some sources it was our old friend speltz that assumed an alias calculated to deceive; from other places it was macaroni wheat that had gotten out of its own bailiwick and masqueraded as "corn-wheat." But from Idaho our elusive friend "corn-wheat" is simply Polish wheat, or "Triticum polonicum." This variety of wheat is an odd-looking product, and is easily the king-pin of all the "corn-wheats." I inclose a few grains of this variety. Polish wheat comes nearer to the "Record-Herald" description than any other grain. We have experimented with this grain now for three or four years, and the inaccuracies of the "Record-Herald" article become apparent from the following facts as determined by us: It is not a drought-resister on our grounds. It succumbs easily to the attacks of rust. It is the poorest yielder of all the wheats with which we are experimenting. For example, it gave a yield of seven bushels an acre of miserable, shrunken grain, while macaroni wheat in a contiguous plot gave a yield of twenty-seven bushels of good grain. It is not much of a stooler. It makes as poor hay as any of the wheats. It is not something new to the United States Department of Agriculture nor to our experiment stations. We are not propagating it, nor are we distributing it, because we deem it worthless. If it has any value anywhere, it is not in the Great Plains

GRAINS OF POLISH WHEAT
(Natural Size)

region. I am sorry to say many farmers have been swindled with this so-called "corn-wheat," many to our knowledge having paid as high as ten cents a pound for it.

The whole miserable fake story originated in the fertile brain of a Pacific Coast space-writer, and it has done no little mischief. I wish again to emphasize the fact that this Polish wheat is without value in conditions similar to ours, and consequently in the semi-arid wheat-growing regions. If there is any place where it even approximates the "Record-Herald's" claims, I do not know where it is. In short, we are all waiting "to be shown."—James H. Shepard, of South Dakota Experiment Station, in The Breeder's Gazette.

[An experiment with "corn-wheat" made in central Ohio the past season under my observation gave the same results named by Professor Shepard. The coarse-growing plants were severely attacked by rust, and the heads were badly affected by the scab, consequently there was a light yield of shrunken grain. The yield of a half-acre plot was three or four bushels, but this was not determined exactly on account of the oats and barley that came from the mixed seed sent out at a high price by one of the distributors.

The accompanying cuts show a head of Polish wheat grown in Ohio, and grains from a sample sent from Oregon. From a careful examination of samples of grain and heads, and from reports from reliable growers, received from the Far Northwest, I am convinced that large crops of fine quality have been grown in certain localities in Oregon, Washington and Idaho, where the climate and soil are unusually favorable for this odd kind of wheat. But as a crop for the semi-arid regions and for the winter-wheat belt, experiments fully justify the term "fake" in connection with "corn-wheat."—ED.]

The Farmer's Faith

If there is one psychological quality more than others that the farmer needs, it is faith. I do not mean that orthodox kind that expects an extravagant harvest from a stingy sowing, that expects prayer to take the place of work, or meekness of spirit to supplant manure, or accepts a trust in Providence as an excuse for laziness. We have no recent records of ravens feeding the elect. But I mean that the successful farmer needs the faith that will inspire him to a liberal manuring of his land, a good plowing and tilling of it, a wise and liberal sowing of good seed, and all the well-doing that comes as the right of the harvest. He must have a realizing sense that these things he must give. There can be no material objection to any purely devotional exercises in which he may choose to indulge—in truth, no one should discourage such manifestations of his spiritual inclinations—but I verily believe that the good Lord loves a hustler.

I do not recommend that this farming, working man shall have a blind faith in everything. There have always been false teachers and quack doctors, and our profession of agriculture is no more safeguarded against such than is any other business of life; but the farmer's faith should early reach such a state of development that he will know he must intellectually qualify himself to be a reasonably competent judge of what is taught him. Some fellows will come to him as teachers who are merely talkers. Some one who has read that twenty bushels of lime to an acre will make clover grow, and arithmetically concluded that if twenty bushels will produce two tons of clover hay, by the same sign two hundred bushels will produce twenty tons, will go forth proclaiming it; another will try to teach us that we can fatten hogs on pumpkins, and yet another that we can take a worn-out farm, and by plowing down a crop of cucumbers or a late spring snow, bring back to the soil the beautiful, dark, lively color and quality of its virginity. He will have no faith in these things, for if he shall be anything of a farmer it is not presupposed that he is very much of a fool. He must have sense enough to know that man can accelerate the forces and operations of nature but very little; that what it has taken a number of years to unprofitably exhaust from the soil, a number of years and much labor and patience and faith must be used to profitably restore. But he must have an abiding faith in the method and in his final success.

He needs to have a faith in the possibility of improving seeds and the strains of his live stock. All the things with which we have to do on our farms are illustrations of the evolutionary results of the care and labor of the pioneers who had faith. The good cow or horse or hog or sheep of to-day would greatly puzzle Noah to classify according to the bill of lading of what he took into the ark. The farmer-breeder's faith should induce him to study the processes of this great evolution, and that study inspire him to hold fast to that which has been proved good.

The same faith that encourages him to not withhold enough of his good seed and labor to insure a good harvest will influence his proper feeding and care of his animals; it will exalt him with an appreciation of the dignity and civic rights of his business; it will beautify his home, elevate his life, educate his children, and surround him with the salutary atmosphere of the highest type of American citizenship.

W. F. MCSPARRAN.

Notes and Comment

The production of beet-sugar in 1903 probably exceeded that produced from the cane by almost two million tons.

Among the available Mexican vegetables that the United States Department of Agriculture expects to introduce in 1904 are various kinds of peppers and several varieties of tomatoes.

The magnitude of the nitrate of soda industry is shown by the fact that one hundred and twenty-two thousand six hundred tons are now on the way to the United States from Chili in South America, which will arrive here during the winter months.

The largest cargo of apples ever shipped from New York was sent November 19th on the steamer "Main," which arrived at Bremen December 2d. It consisted of twenty-two thousand nine hundred and twenty-nine barrels and one thousand five hundred and forty boxes.

With a good eight-horse-power gasolene-motor it is probable that for traction and traveling purposes, plowing, seeding, harvesting, sawing wood, pumping water, grinding feed and many other uses the "auto" is likely to supersede the use of horses to a considerable degree. The "auto" as a farm power has evidently come to stay.

The Iowa State Agricultural College, at Ames, has adopted the right method of inciting interest in progressive agriculture. At a fixed date excursion-trains are run from all parts of the state to the college, where the various lines of work relating to agriculture are open for the inspection, comment and instruction of visitors.

The probability is that the next article of food that will be exploited in the same manner that oatmeal and many of the other breakfast foods have been, will be macaroni and the edible pastes. These articles of food are used almost exclusively by all classes in Italy. They are easily prepared, and will constitute a cheap, healthful and very palatable addition to our ever-increasing variety of table-supplies. * * *

HEAD OF POLISH WHEAT
(Natural Size)

Gardening

By T. GREINER

FINE WEATHER in the late fall should not be allowed to lull us into a feeling of security, but we often let it do that. Last season such a mistake cost me a lot of fine celery that might have been put to good use. It was parts of the rows of Golden Self-Blanching, of delicious tenderness and sweetness, and consisted of just such close and compact bunches as one can grow on the very richest soil by blanching with very wide boards. Being ready for immediate use, it might have been dug, properly trimmed, and packed in boxes between layers of damp moss, the boxes being stored, with the celery standing upright in them, and tops open, in a cool, dark, damp cellar. Handled in this way, I have kept celery in good order, and had my regular daily supply, for many weeks after severe winter weather had set in for good.

GROWING LARGE ONIONS.—A reader in Decatur, Ill., says he has been informed that the way to grow large onions is to bend the tops over, so as to throw the growth all into the underground part. This proceeding is recommended by many growers, but I don't "see the point." When an onion is bound to produce a scallion, or thick-necked onion, it seems to do that because the conditions for that sort of development are favorable. All the bending over of the tops which you may practise will not make a nice smooth bulb of it. We should go back, and begin at the beginning by furnishing conditions which favor bulb-development rather than top-growth. We can do that in most cases by early planting, so that the proper start for the desired growth is made in the cooler weather of early summer, with just about the proper amount of moisture. In hot weather, or in long hot days, when the ground happens to be overcharged with moisture, the tendency of the onion-plant is to make top-growth, and consequently to run into thick necks. Ordinarily, I like to see a good, strong, healthy growth in my onion-tops, for with favorable weather-conditions it means Prizetakers and Gibraltars weighing from a pound to a pound and a half apiece; but I have never seen good results from rolling, bending or breaking the tops over.

IN SELECTING A SPOT FOR THE GARDEN, I prefer a plot of ground without so much as a single tree or shrub on it. Any permanent growth of this kind seems always in the way. It breaks into the solid rows of things we may wish to plant, and reduces the yield of most crops for quite a circle around the tree or shrub. It takes sunlight, robs the garden-plants of food and drink, and mars the attractiveness of the whole patch; for the beauty of the vegetable-garden lies mainly in its regularity, in straight rows and evenness of crops. Even a single tree in the garden interferes with all the garden work, with perfect plowing, perfect harrowing and thorough cultivation. And finally, it may prove a harboring-place and feeding-ground for injurious insects, and possibly for injurious birds. If the garden-patch is to be used permanently as such, I would cut down even an otherwise useful fruit-tree standing on it. The fruit on such a tree would be far too expensive.

NO GRASSY MARGINS, either, are wanted bordering the garden spot, and if shrubbery or herbaceous perennials of any kind are to be allowed in close proximity to it, they should be only such as can be given perfectly clean cultivation, and such clean cultivation must be given. The cutworm is a dangerous foe in any spot where it can have the shelter and food offered it by any wild or half-wild growth of grasses, herbs or other growths. Clean culture in the garden, and bare ground around it, are the best preventives of cutworm depredations. I fight the cutworms, and wire-worms and grubs, too, on these lines, and have not much trouble on their account. Late-fall plowing is an especially good thing for giving to the wire-worms, and grubs, too, a thorough backset. Sometimes, when we have neglected to plow the garden spot in the fall before the ground freezes up, we have a chance in early winter, and it should not be neglected then.

THERE IS NO PARTICULAR OBJECTION that I can see, however, to planting garden crops for a year or two in a newly set orchard. The thorough cultivation which potatoes, cabbage, onions, radishes, carrots, beets, turnips or any other ordinary garden crops require, and the good feeding usually given to them, will also help the trees, and give them a start and push which will keep them booming for years to come. But do not imagine that you can grow good garden crops and good trees on the same land at the same time without proper feeding—I might say, without double rations. Potatoes require much potash; cabbage requires still a good deal more of that element—in fact, I know of no crop which takes the potash out of the soil as fast as will cabbage and cauliflower. Trees will not thrive without a good lot of potash in the soil. Do not expect big crops of cabbage and a big growth of trees when thus planted together unless you use potash, either in ashes or muriate or other forms of potash, with a very liberal hand. In many cases you might use five hundred to eight hundred pounds of muriate of potash or its equivalent to the acre to good advantage, and it would be a mistake to use less. Strawberries often do first-rate in a newly planted orchard, and I would not hesitate to plant them in such position, of course looking after their proper feeding, which means the use of plenty of potash, too. Such cropping will do for a few years, but when the trees begin to make a thrifty growth, and to shade the ground to a considerable extent, it is time to give the entire ground up to their exclusive use.

DO NOT CROWD.—J. F. G., a reader in Dublin, Ind., wishes to caution the readers against the practice of crowding vegetables excessively in the home or market garden. He planted rows of beans between his newly planted strawberries, and pumpkins among his raspberries. The ground being very rich, the bean and pumpkin vines of course grew very rank, and smothered the strawberries and raspberries. I always like to make the most of my chances, and plant as close as can safely be done; but there is a limit to it. We must know what growth we can expect, according to the character of the plants and the fertility of the soil. It is safer to err in the direction of the "do not crowd" plan. With plenty of space between the rows we have a much better chance for cultivation, and with plenty of room between the specimens in the row we get larger and more perfect vegetables. However, if we are crowded for room, and can give to the close-planted stuff timely and proper attention right along (with hand-hoe, if necessary), it is perfectly feasible to crowd our crops to a certain extent—that is, to the limit of covering the entire ground, but without attempting to have two things cover the same ground at the same time. I have planted early cabbage or early beans or peas in a row midway between the rows of strawberries in a new bed, and onion-plants between the strawberry-plants in the rows; but if we do that, the secondary crops—beans, peas, onions, etc.—should be promptly taken off, and the ground cultivated or hoed as early as possible, and before the strawberry-plants, with their new runners, will need the room.

FORCING-HOUSES. — The great majority of home gardeners, and most small market gardeners, too, rely for their supply of early plants on hotbeds and cold-frames, if not altogether on purchase from a professional plant-grower. I will not deny that something can be done in this line even with a modest hotbed and a few frames, but it is safe to say that the gardener with the hotbed is always at a disadvantage compared with the man who operates even a very modest forcing-house. It may be true enough that "the successful forcing of vegetables and fruits in winter requires the highest skill of the gardener, and that the novice had better go slow until he learns by experience, or had better work at the business a while under skilful instruction," yet I find that in order to start my plants as early in the winter as I must have them in order to get the earliest crops and the most profit and enjoyment out of them, I need the help of a little forcing-house. I cannot do it so well with a manure-heated hotbed, no matter how much skill I may bring to bear on the task. But for the purposes of plant-raising it is by no means necessary, although sometimes more convenient, to have a costly or elaborately put up greenhouse. Any little structure which gives protection against the winter cold, and proper light by glass covering, will be serviceable, whether it be heated by means of hot-water pipes, a common brick flue, or even a wood or coal stove. We don't need much fire for plant-raising. The first thing I plant (January or February) is my Prizetaker and Gibraltar onion seed. This grows in a rather low temperature, and if the temperature should now and then sink below the freezing-point, no particular harm would be done. If the seed is sown late in February, the sun begins to help warm up the building considerably during the day, and the nights are getting shorter. In March and April we may need a little fire only on cold, dark days and in the night. Under such conditions we can grow cabbage, lettuce and beet plants without much trouble, and much more easily and conveniently than in a hotbed. It is only for starting egg-plant, tomato and pepper plants, etc., that we will need more heat, and when the house is heated by means of a flue or a stove, we can usually get that by placing the flats or boxes in which these seeds are sown near the fireplace or stove. A bulletin on "Growing Vegetables Under Glass," which was issued by the North Carolina Experiment Station some time ago, says: "For the gardener who wishes to grow only the crops we have named (vegetable plants), and who does not intend to go into winter forcing under glass, but a small greenhouse will be needed. The house is to be used simply for the starting of plants to be afterward used in the frames [or directly in open ground—ED.], and to take the place of the uncertain and laborious hotbed. Such a house can be easily built by any one who can handle a saw and hatchet." This is all correct. I have seen some such houses put together in the cheapest way, with ordinary hotbed-sash (three by six feet) which happened to be on hand, some posts, old timbers and boards, causing hardly any cash outlay, and heated by a cheap, perhaps old, box-stove or a flue at small expense, yet giving excellent service, and satisfactory results in early plants. If there is any chance for the small gardener to put up a structure of this kind, or one more pretentious if he can afford it, he should not hesitate a minute to do it. It is worth all it costs, and will make gardening more satisfactory, more profitable, and a great deal more pleasant and enjoyable all around.

The Distribution of Seeds and Plants

As set forth in my last report, a number of changes have been made in the securing and distributing of seed for congressional purposes. Instead of contracting for all of the seed, and having it put up by one firm, the United States Department of Agriculture has purchased the seed, and then arranged for the putting of it up by contract. This is a great improvement over the old method, as it practically removes all opportunities for difficulties which have been encountered in the past in the matter of substituting inferior seeds for those called for, giving short weights, etc. With the enormous amount of seed that has to be purchased in the congressional distribution, it is impossible to make provision in advance for everything that will be required. If seed was a fixed commodity it would not be difficult to make specific contracts for the delivery of particular quantities at particular times. So much, however, depends upon weather and other conditions that it can never be determined until the harvests are all over as to what seed can and what cannot be obtained. For this reason it is not practicable, nor is it desirable, that the department should endeavor to secure its seed by the ordinary contract system. Inferior seed can so easily be substituted for good that the department must devote special attention to this phase of the subject, in order that nothing but the best may go out.

To accomplish this, seed for the most part must be purchased in the open market from men who are known to be reliable and in whom dependence can be placed for furnishing seed according to contract. To protect the department in all of its interests, inspectors are kept constantly in the field during the growing-season looking after the crops that are being grown for the department, and in other ways keeping track of the seed-conditions in general, so as to be intelligently guided in the matter of purchases. Furthermore, the department, by judicious placing of orders for seed, can encourage home industries. This it is endeavoring to do in every case where it is practicable. In a number of instances, where certain kinds of seed are grown to a large extent abroad, the department has placed its orders with American growers, in order to encourage the work in this country. This is particularly the case with flower-seed, of which a number of kinds are now being specially grown for the department on the Pacific Coast and elsewhere.

Carrying out the plan as set forth in my last report, special attention has been given to particular crops, such as cotton, forage-plants and other crops. In the matter of cottons an effort has been made to secure for general distribution varieties which have come to the attention of the department's officers as valuable sorts, but of local distribution only. The work in this connection has been exceedingly valuable, and many reports have been received as to the greater usefulness of the varieties distributed over those locally grown. The same is true of a large number of forage crops. A particular effort has been made in the matter of distributing home-grown sugar-beet seed. It has been found that sugar-beet seed can be grown successfully in this country, and that the beets from such seed yield a high sugar content. Ten thousand pounds of such seed were distributed last year, and careful work was inaugurated to determine the value of the product from these seeds as compared with seed grown abroad.

With regard to the securing and distributing of miscellaneous garden and flower seed, the fact remains that this work does not accomplish the ends for which the law was originally framed. There are collected, put up and distributed now, on congressional orders, nearly forty million packets of miscellaneous vegetable and flower seeds each year. These seeds are the best that can be obtained in the market; but from the fact that large numbers of packets are wanted, the seed obtained can be of standard sorts only, such as are to be found everywhere for sale in the open market. As there is no practical object to be gained in distributing this kind of seed, it seems very desirable that some change be made. To this end it would seem wise to limit our work entirely to the securing and distributing of seeds, plants, etc., of new and rare sorts. There is still much to be done in the way of securing seeds, plants, etc., of this kind from abroad, but still more to be accomplished in careful investigations of our own possibilities in this direction. There are many valuable plants scattered all over this country which are still but very little known outside of their respective localities. These should be collected, tested and distributed. There are also great possibilities of improving agricultural industries by distributing specially bred seeds and plants.

As the plant-breeding work of the department increases, opportunities for securing seed of this nature will accumulate. To do this work in the most effective manner, arrangements could be made in all cases to secure the advice and assistance of senators and representatives who have agricultural constituents. The department has a well-organized force of scientists who are thoroughly familiar with the general conditions of soil and climate in nearly all parts of the country. Special crops could be selected for special purposes, and with the advice and coöperation of members of Congress such crops could be placed where they would do the most good. This is a line of work that would result in very much more value to individual districts throughout the country than the distribution of a large quantity of common varieties of garden seed, which have no particular merits so far as newness or promise are concerned. I shall inaugurate the coming year work along the lines here mentioned, and hope to receive the coöperation and aid of Congress in this matter.—From 1903 Report of the Secretary of Agriculture.

Fruit Varieties

The question of what varieties of fruit to plant has been a very hard one for fruit-growers and farmers in Oklahoma to answer. It is now no less important than it has been in the past, but it is much easier to select the proper varieties. There are now a good number of varieties that do well in all parts of the territory, and new varieties are being brought out that have been discovered here and prove their worth.

There are now a good many varieties coming into bearing that are supposed to be new, but that have been in cultivation for a long time in some of the Eastern states and have not been widely disseminated or planted in the West. Some few of these old varieties are showing a great deal of merit in some localities, and are worthy of extensive tests. The Rutter pear has been found to be a case of this mistaken identity. This is an old variety, but new to most people, and promises to become a very popular pear. The Winesap apple has also passed for the Arkansas Black, and has thereby won much favor for the latter unworthy variety. Many of these mistakes are the result of fraud by tree-peddlers, one variety having been sold and a different and more common one delivered in its place. In some cases this has worked to the ultimate benefit of the farmer, as in the case of selling Arkansas Black and delivering Winesap instead. In most cases, however, where substitution has been made without the knowledge of the buyer, cheap and inferior varieties have been used.

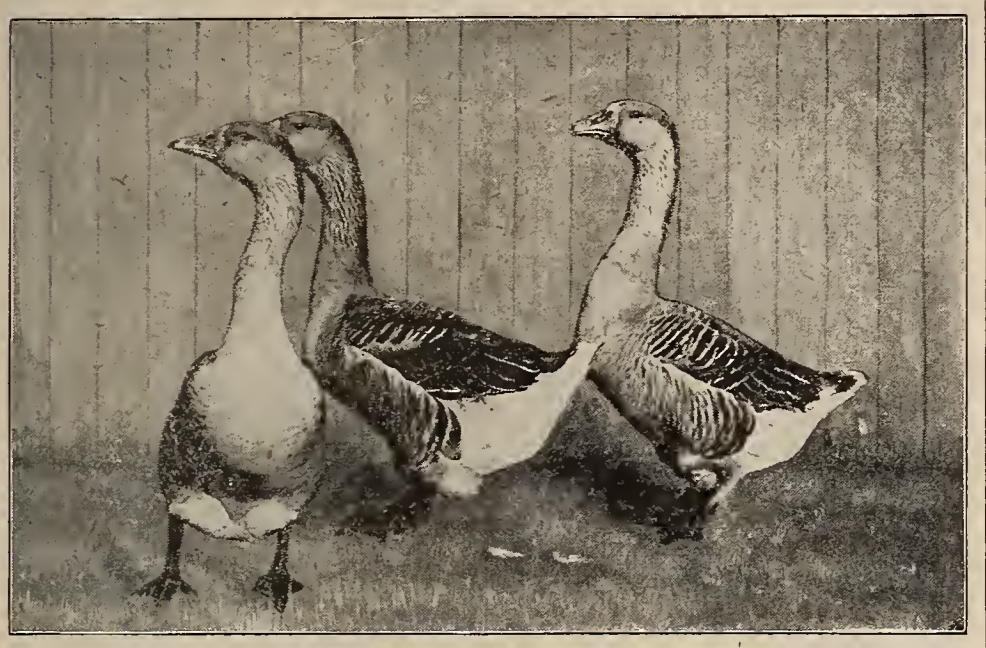
A variety of real merit and of doubtful identity should be identified and called by its proper and original name, but if it cannot be identified with a reasonable expenditure of time and effort, a name should be given it, and it should be propagated and placed upon the market. It is more satisfactory to have all fruit named, but the name should always be held secondary to the real value of the fruit.—From Bulletin No. 59 of the Experiment Station at Stillwater, Okla.

Poultry-Raising

By P. H. JACOBS

Preservation of Droppings

THE droppings may become hard and insoluble when exposed to the air and allowed to dry to a gravelly condition. The value of the droppings is greater than may be supposed, and they are better for some purposes than are any other manures, being free from the seeds of weeds. If the droppings are carefully saved, they will be found excellent for the garden. It is better to broadcast poultry-manure over the surface of the ground after the land is plowed or spaded, raking it into the soil. To apply it in the rows or in the hills is to incur risk of damage to tender plants. It may be mixed with dry dirt, land-plaster or kainite, and if there are lumps in the manure they should be pulverized to a fine condition.



TOULOUSE AND AFRICAN CROSS-BRED GEESE

Breeds of Geese

Many prefer the largest breeds of geese, although they are not always as hardy as the smaller varieties. The latter are also better foragers. The Embden and Toulouse breeds are the largest, the adult gander sometimes reaching as much as fifty pounds alive, but about twenty-five pounds for the gander and twenty for the goose will be found the average weights of the adults. Of the two breeds, the Embden is probably a little more active, but for general marketing the one is practically as good as the other in that respect. Starting with good stock, one will have a foundation for increase. Either buy eggs for hatching or two or more parent birds. There is nearly always a demand for plump, fat geese. The Embdens are white—both gander and female—and the birds are quiet in disposition. They do not possess the low pouch under the body peculiar to the Toulouse, and are valuable also because their feathers are entirely white.

Hens and Chicks

As chicks will be hatched by hens early in the year, it is in order at this time to advise against the use of corn-meal as an exclusive article of diet for chicks, although it has been considered an indispensable adjunct to success with very young ones. While corn and corn-meal are the most convenient foods to use, yet they are not suitable when made the prime source of supply for young or adult poultry. In the winter, when the weather is cold and the birds should be kept warm, corn is the material for that purpose, as it is rich in carbon and creates warmth; but for growing chicks it is insufficient. It must be considered that unless the growing chick is supplied with all the elements necessary for assisting in the formation of bone and muscle it will gradually droop and die without apparent cause, although sometimes the chicks will appear healthy, but do not grow. When fed on corn-meal, very young chicks are often attacked with bowel disease. The safest plan to adopt for a cure is to immediately change the food to an entirely different kind. Some may claim that they raise chicks on corn-meal, which is true, but only when the chicks have an opportunity to forage and secure insects and worms. Exclusive corn-meal is only a partial and incomplete food. Cold is also a serious drawback to very early chicks, as a young chick quickly succumbs to cold, and even more quickly to dampness. Even the young duck cannot exist under damp surroundings. Therefore the chief objects should be to avoid dampness and to keep the chicks warm. No hen should be allowed to carry her chicks wherever she pleases in cold weather. The hen that is confined when the chicks are very small in a coop with a dry board floor, and where the chicks can at no time become subject in the slightest degree to dampness, will be successful in raising her brood. The chicks may be put out in the ground later. A coop four feet square made of lath will provide ample accommodations for a hen and ten chicks. No house is necessary if the lath runs are kept under a shed or on a barn floor. The chicks will demand attention, however. Regularity of feeding and a variety of food, with strict cleanliness, is very important; but as the early chicks are those that bring the highest prices, the poultryman will be amply compensated for the labor bestowed. The winter season is an excellent period for working with poultry, as more attention can then be given the hens and chicks.

Maturity of Fowls

The Leghorns may mature in six months, but with the larger breeds a fowl is not mature if under one year of age; and it is a settled conclusion that neither animals nor poultry should be used for breeding until the system has had time to develop and make complete growth. Pullets sometimes begin to lay before they are fully matured, but in such cases their eggs should not be used for hatching purposes. The use of eggs from pullets that have not completed their growth is sure to injure the flock if the practice is continued for several years.

Protection Against Cold

Feed at regular hours, giving the lightest meal in the morning, as it is better to have the fowls a little hungry rather than overfed, so as to induce them to work for scattered grains. It is not advisable to feed at noon. The heaviest feed for poultry should be at night, as rest and quiet favor digestion, while a full stomach is the best protection against cold during winter nights. If any corn is given, it should be at night. In winter it will be all the better if it is warmed and some of it charred. At night, when exercise is impossible, no unnecessary burden should be placed on the system. In the morning it is better to feed poultry with grain scattered among straw, thus compelling them to scratch for it.

Inquiries Answered

CROSSING PLYMOUTH ROCKS.—S. R., East Liverpool, Ohio, desires to know "if it will be of advantage to alternate each year with males of White and Barred Plymouth Rocks." The use of a white male one year and a barred male the next simply insures against close inbreeding, but breeds or varieties can as easily be kept pure.

BUYING CHICKS.—L. T. E., Hamburg, Wis., "prefers to buy newly hatched chicks instead of eggs, and requests advice thereon." The difficulty is that the shipping of very young chicks to any considerable distance renders them subject to cold, irregular feeding, lack of attention on the journey, etc., making the venture liable to loss.

DUCKLINGS.—E. G. M., Dillsburg, Pa., asks "when ducklings should be hatched, and which month usually shows the highest prices." Those who hatch ducklings for market begin as soon as the ducks start laying—about January or February—getting them to market when about eight or ten weeks old. May and June are the best months for prices.

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in the poultry business. How to have laying hens when eggs are dear. How to get broilers on the market while prices are up. How to raise the heaviest fowls. Hundreds of hints and helps that will make it valuable in any poultryman's library. There is a scientific discussion on the development of the chick in the shell which a well-known poultry authority says is the finest treatise on the subject ever written. The practical experiments our experts describe show the lines on which the most successful work can be done. It tells, too, the story of the Victor Incubators from the rough lumber to the finished machine, the points in construction, in finish, mechanical operation, and the little details which mean so much in the perfected machine. It tells you the reasons why you should have a Victor and how the Victor can make money for you. The best of it is that every word in the book is true. We tell just the facts, just what you would see if you came to our factory and saw the making of the machine.

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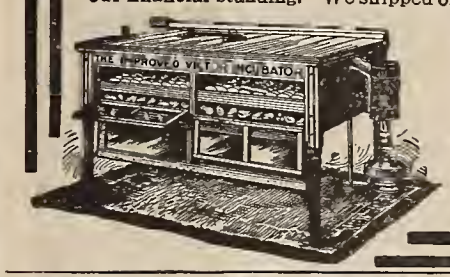

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Mr. Cyphers, formerly of the Cyphers Incubator Co., Buffalo, N. Y. has severed his connection with that concern and established a new organization under the title of Chas. A. Cyphers Co. for the manufacture of incubators and brooders of a much improved style. It will pay you to write for a copy of his preliminary circular and ask to be registered for a copy of his 1904 catalogue which will be ready about Jan. 10th. Address
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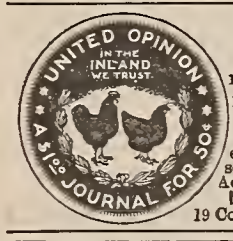

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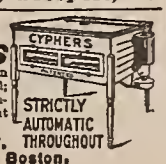

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BY FEEDING COWS

KELLOGG'S Condition Powder.

No trace of either appears in milk or butter. The unfailing remedy of dairymen and stock raisers for **Abortion, Barrenness, Retention of Placenta, all Breeding Troubles.** Write for free booklet.

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A herd of the most beautiful Shetland Ponies in America. Cleanly bred, registered stock. Write for prices to THOMPSON PONY FARM, Toledo, Ohio.

Live Stock and Dairy

A Great Steer

THE champion fat steer at the recent International Live Stock Show at Chicago was a grade animal, carrying the blood of Herefords, Angus and Holsteins. Who will claim the honor for the breeding of the steer cannot be foretold, as it may be the signal for a new "battle of the breeds;" but the honor of selecting the animal as a good individual for feeding purposes, feeding him afterward, and bringing him to Chicago as a great show-animal, carrying off the first prize where some of the world's best animals were in competition, belongs to the Nebraska Agricultural Experiment Station. Prof. H. R. Smith selected the steer at the stockyards, and advised in its feeding. The actual feeding was done by Herdsman Charles Shumat. These two gentlemen will no doubt make an equitable division of the honors.

When bought, about the middle of April, the steer weighed thirteen hundred pounds and cost sixty-five dollars. He was fed for six and one half months, and made a total gain of five hundred and fifty pounds. During the last two months ending with the time of his showing he gained exactly two hundred and eighty pounds. His grain feed was made up of corn, oats, bran and oil-meal. During the feeding-time corn was sixty per cent of the ration exclusive of the roughage. The other concentrates were varied at different periods of the feeding, the oil-meal in particular being increased from fifteen per cent at the start to twenty per cent after September 1st. The roughage was alfalfa and prairie hay. He was given all he would eat of both grain and roughage. Twenty pounds of the grain mixture was eaten each day during the last stages of the feeding. On October 1st two pounds of sugar-beets were added to the ration each day, the quantity being gradually increased until ten pounds a day were eaten.

The steer was sold during the show for four hundred and forty-nine dollars and eighty cents. While this price is not up to that often received for such animals, by reason of their achievements in the show-ring, it allows a good margin of profit over the cost of feeding. The actual figures of the cost of feed, however, if they are to be given, will give us a better idea as to whether at such prices as may be obtained for fat steers on ordinary sale, with the sensational elements of the show-ring eliminated, the methods of breeding and feeding this animal may be put into profitable practice by the plain feeder.

As a feeder of animals, my judgment is that for making profit a good individual of either the Hereford or the Angus breeds would have made beef more cheaply, and that it is quite likely that with oats, bran, oil-meal and alfalfa in the ration the cost of making it so "narrow" is heavier than farm feeding would justify. W. F. McSparran.

Suggestions

CARE OF ANIMALS

The milk of any animal suffering from disease should not be used for food in any form.

The milk from fresh animals should be rejected until after the ninth milking.

Ensilage, turnips, etc., should only be fed immediately after milking, so as to allow time for the elimination of the volatile products of these feeds from the system of the animal.

The quantity of above feeds should be limited, so that the animals will consume the entire ration at once.

The milking-stable should be as free from dust as possible at the time of milking. Feed dry fodders after the milk is removed from the stable.

Brush the udder and flanks with a stiff brush to remove the dirt and loose hairs. Sponge off the udder thoroughly with clean water, leaving it moist, but not dripping-wet.

Use only clean tin milk-pails. Reject all rusty or patched tinware in the milk business. Unless seams and joints are extra well soldered, it will pay to have an extra coating over all the seams, and the joints well flushed.

The milker should wash his hands thoroughly with soap and water, just before milking. Under no conditions should the hands be wet during the milking.

MILKING

Milk should not be left in the barn during the milking, as it can absorb odors even when hot, and become contaminated with bacteria from the air.

Milk even when warm should be strained through several layers of cheese-cloth. This strainer should first be washed in tepid water and boiled after every milking, and then dried.

Milk should be aërated immediately after being drawn. Aërators are best suited for this purpose, but stirring, dipping and pouring it will reduce in part the peculiar odors present in fresh milk.

Milk should be immediately cooled after being drawn from the cow. Where possible, use ice or cold running water. A quick reduction in temperature checks the development of any bacteria that may have fallen into the milk during milking.

STORAGE AND TRANSPORTATION

Milk should not be kept in the barn over night. The dairy store-room or building should be free from all foul smells. Stable and hog-pen odors can be easily absorbed by the milk.

The milk should be kept cold until it is delivered. An initial cooling is useless unless it is continued.

In hauling milk to the factory, the cans should be full or the covers pushed down to prevent churning.

Cans should be protected by a covering, to prevent dust from settling on the cans, and to protect the milk from the sunshine.

CARE OF UTENSILS

Factory products, such as whey or sour skim-milk, should be returned in other receptacles than the cans used for bringing milk to the factory. This custom of returning waste products to the farm in the cans used for milk is the cause of much trouble in the cheese industry.

Milk-cans should be cared for as soon as returned to the farm. They should be rinsed in warm water, then thoroughly cleaned, and left in the sunshine to dry, inverting so as to permit circulation of air.

All dairy utensils should receive as stringent treatment as the cans.

In caring for milk, it should be remembered that two things are necessary—to prevent the absorption of any foul odors, and to prevent the development of living organisms in the milk that are able to form foul substances that taint the same. The first can be accomplished by keeping taint-producing feeds from the cow, and by keeping the milk in a place that is free from all undesirable odors. The second result can be attained by thorough cleanliness, combined with a low temperature. Dirt and filth are so intimately connected with bacteria in nature that germ life can be largely excluded by keeping out the dirt. The efficiency of this method, however, does not depend upon a removal by straining out the visible dirt, for under such conditions the bacteria adherent to these particles are washed off, and cannot be removed by filtering or straining. If the milk is kept at a low temperature, the development of the bacteria in the same is greatly retarded. These organisms obey the laws that govern the growth of all plant life, and just as our cereal grains will not grow in early spring or winter, so the bacteria present in the milk are greatly checked in their development, or even prevented from growth, by lowering the temperature of the milk.—Dr. H. L. Russell, of Wisconsin Experiment Station, in "Creamery Patron's Handbook."

Brains and Blood Necessary

Twenty years ago Kansas had but 471,548 milk-cows and scarcely a creamery worthy the name, and their product was unsought.

Ten years ago Kansas had 567,353 milk-cows. Creameries of a better class were being slowly established, but their output begged a market.

To-day Kansas has 802,738 milk-cows, or more than at any previous time, and many high-grade creameries and cheese-factories, including the largest creamery in the world, hundreds of contributory receiving and skim stations, and their product is not only favorably known in the principal markets, but sought beyond the supply.

Thus is marked the progress of this industry in Kansas—in a decade becoming one of the most prominent of successful dairy states. While this is true, and within that time the aggregate annual value of our dairy products has nearly doubled, and while our foremost dairymen, by constantly striving to raise the standard of production, now have excellent high-yielding herds, it is unquestionably a fact that large numbers of our cow population are not paying for their keep. The cause for this is to be found either in the man or the cow, or both.

Brains in the man and blood and feed in the cow are essential to success in Kansas, as elsewhere.—Secretary F. D. Coburn, in September Quarterly Report of the Kansas Board of Agriculture.

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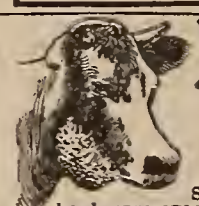

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No trouble—rub it on. No risk—your money back if it ever fails. Used for seven years by nearly all the big stockmen. **Free illustrated book** on Lump Jaw and other diseases and blemishes of cattle and horses. Write for it today.

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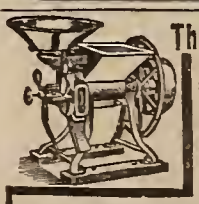

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by its grinding (some say it's a half) will shortly buy you **THE BEST AND FASTEST** mill made for crushing ear corn and mixing and grinding all kinds of grain in right proportions. **Ball bearings** make the

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the easiest running mill in the world. Its double hopper gives you an even mixture of chop, ground coarse or fine, just as wanted. It does these things to your satisfaction under our guarantee, **AND YOU HAVE TIME TO PROVE IT. IF IT FAILS, RETURN AT OUR EXPENSE.** A mill that's made to serve and last. Don't buy till you send for our free 37th Annual Catalog. We sell gas and gasoline engines carrying a five year guarantee.

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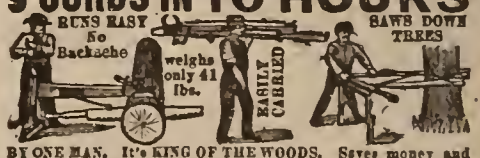

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are the best churns because—no hoops to drop off; no seams to open and leak; no rancid sour odors—cream can't soak into tin. Double coated with tin inside. Mounted on angle steel frame—neater, stronger and better than wood frame. Full sized mouth. Churns 1 to 7 gallons. Cover cork lined with glass vent and peep. They last as long as you will need a churn. Catalog free. We are Headquarters for Milk Cans of all kinds.

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The great poultry tonic and remedy is the prescription of Dr. Hess (M.D., D.V.S.) for producing poultry health, strengthening the digestion and compelling the system to rapidly convert the food into eggs, muscle, bone, etc. It is guaranteed to make hens lay and to cure cholera, roup, indigestion, and costs but a penny a day for 30 fowls. Price, 1½ lbs. 25 cents; 5 lbs. 60 cents; 12 lbs. $1.25; 25 lb. pail, $2.50 (except in Canada and Pacific Slope). **Instant Louse Killer** kills lice on poultry and stock of all kinds, ticks on sheep. 1 lb. 25 cents; 3 lbs. 60 cents.

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and ALMANAC for 1904, contains 216 pages with fine colored plates true to life. It tells all about chickens, their care, diseases, and remedies. All about **INCUBATORS and how to operate them.** All about poultry houses and how to build them. It is really an encyclopedia of chickendom and no one can afford to be without it. **PRICE ONLY 15 cents.**

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get strong and healthy—gain steadily in weight, are chicks hatched in Reliable Incubators.

The Reliable

provides automatically a constant current of odorless, warm air at a uniform temperature—chicks pip, hatch and thrive under its nature-like conditions. Send 10 cents and get our 20th annual catalog—full of poultry information.

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Absolutely the highest grade machine on market and sold lower than any other in its class. Will pay for itself first season by what it saves and bigger hatches. Our "Boiled Down" Catalog proves all claims. Sent free.

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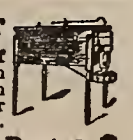

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Live Stock and Dairy

Raising Calves on Separator-Skimmed Milk

SKIMMED milk from a good separator has in it about five tenths of one per cent of butter-fat, instead of three and eight tenths per cent of fat contained in average whole milk. Its value is variously estimated at ten to forty cents a hundred pounds to feed to calves and young pigs. It is much more valuable sweet than sour, and the farmer should demand that his creamery sterilize the skimmed milk, so that it may be kept sweet a longer time, according to the Iowa state dairy commissioner.

The same principles of feeding apply as with the feeds for milk-production, the standard being a little different. If the milk as supplied by the cow is the right ration for the calf, then of course the skimmed milk must have something added to it that will take the place of the butter-fat that has been taken out by the separator. In feeds the fats and the carbohydrates serve the same purpose; hence we may add either carbohydrates or fats to the skimmed milk to bring it into balance. There is nothing better than corn for this purpose. Flaxseed-meal is also good, but corn is much cheaper, and is found on every farm in the state, ready to feed to the calf with his skimmed milk.

Feed the calf the first milk from his mother. This colostrum milk is especially provided by nature to set in proper motion the digestive apparatus of the new-born calf. Continue to feed him whole milk for two weeks. Give not more than ten pounds, or five quarts, a day, in three feeds. Then gradually substitute skimmed milk for a part of the whole milk, increasing the one and decreasing the other so that when a month old he is getting skimmed milk. Increase the amount of skimmed milk, if desired, so that at three months the calf gets twenty pounds a day.

When the change is made to skimmed milk, teach the calf to eat shelled corn. The calf needs to chew the corn in order to get the saliva into his stomach. If corn-meal is put in the milk, he will gulp it down without chewing, to the detriment of his digestion.

The heifer calves should not have an excess of corn if they are to be kept for the dairy. Steer calves and those which it is expected to fatten may have about all the corn they will eat.

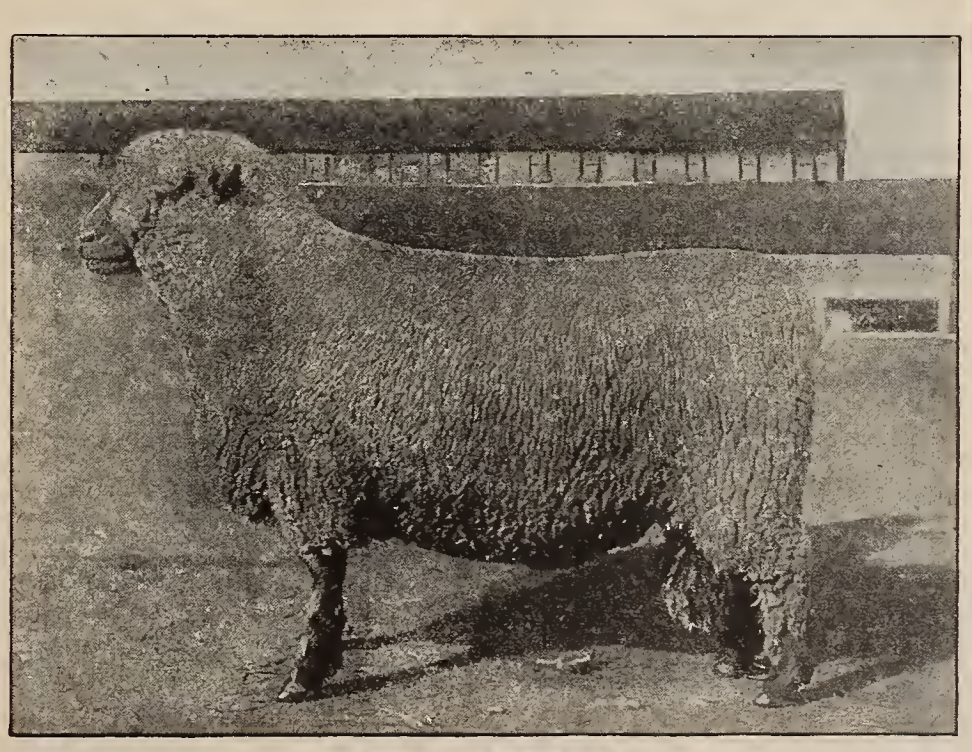
Don't feed the calves too much milk.

Don't feed sour milk.

Don't feed the young calves cold milk.

If you neglect these don'ts the digestion of the calf will be in danger, and lack of thrift, scours and so-called calf-cholera will follow.

With sweet skimmed milk, fed in a cleanly manner, with corn to balance the loss of the fat, calves can be raised that will rival those that follow the cow.—"Modern Dairying," in Quarterly Report of the Kansas State Board of Agriculture.



YEARLING SHROPSHIRE RAM

Challenger

The grand champion steer Challenger, a white-faced blue-roan, shown by the University of Nebraska [at the Fat Stock Show] caused more comment than any champion our shows have ever produced. He is a curiosity. While no one questioned his right to win from a butcher's standpoint, it was palpable that in the feeder's view the yearling Angus from the Minnesota Experiment Station had stronger claims to the honor. Challenger bears the color of the famous blue-grays of Scotland, and is hornless, but it is said that the "coloring-matter" in his coat comes from the Holstein-Friesian. The pedigree as given by the college authorities is this: Got by a Hereford bull out of a cross-bred Holstein-Shorthorn cow. He was picked from a feed-lot near Lincoln, and a certificate reads to the effect that his dam was out of a Shorthorn cow which ran in pasture with a Holstein bull. A fierce controversy raged around the hornless head of Challenger. The Angus and Galloway men claimed it a natural polled head; others declared it had been dehorned—some say by the saw, some say by caustic. He has wee bits of scurs. If his poll is not natural and thoroughly characteristic of the dodded head, we have yet much to learn concerning bovine-skull formation. An effort will be made to secure his skull on slaughter for examination by veterinary experts.

However his breeding, he is a great butcher's bullock. It is singular how some men misread the lesson of this championship. They declare that it put a premium on scrub-breeding, and that the one-fourth cross of dairy blood will tend to encourage the farmer in his mixing of scrub blood. On the contrary, no stronger proof of the beef-making potency of improved blood could be found than the fact that one cross of Hereford blood made a grand champion out of a steer which had strong dairy inheritance. It shows the possibilities of grading up from a foundation which most breeders of beef cattle are pleased to call scrub.

To intensify the storm-center in which this steer complacently stood the whole of the week, his age was challenged. His mouth was found full strong for his reported age according to the dentition test, but of six bullocks picked at random from the pedigreed steers of different breeds, and shown as under three years old, four had mouths as fully equipped with broad teeth, and the protest was not sustained.—The Breeders' Gazette.

Select Good Breeders

If you take a litter of pigs the morning after they are born, and put them in a basket and on the scales, you will find they weigh all the way from sixteen to eighteen pounds, according to the age and size of the mother; then if you weigh them the next morning, and every twenty-four hours in succession, you will find that they have made a live-weight gain of all the way from two pounds, three, three and one half, four, and as high as five, pounds, and in order to gain this weight the sow must have given at the least consideration twenty-five or thirty pounds of milk during the twenty-four hours. That is the way I have milked her. It takes eleven pounds of milk to make one pound of live weight in a fifty-pound pig, and so I can easily calculate. I don't know how many litters of pigs I have weighed on my place. Now, then, gentlemen, if you have a mother that is a good milker, a good mother of a kind disposition, and of good bearing, keep her on the farm, and do not discard her and breed from immature hogs. They should not farrow until they are twelve months old.—Theodore Louis, in Wisconsin Farmers' Institute Bulletin No. 10.

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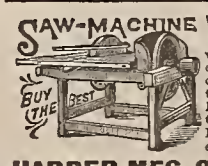

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FARMERS, write for reliable information about Southern farm lands. **Editor News, Monticello, Fla.**

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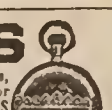

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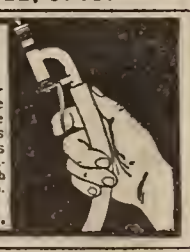

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BERRY PLANTS—60-page Catalogue FREE. Ground-mole trap FREE with each order. HUNTSVILLE NURSERIES, Huntsville, Ohio.

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The Grange

By MRS. MARY E. LEE

Preparing a Paper

"If I write down at once the thoughts that come to me, I can prepare a good paper; but if I wait, I can never collect them again. My best thoughts come in the morning, before I rise; but by the time I have built the fires and done the chores I cannot write a word." So remarked a Patron when discussing the preparation of a paper. His experience is a common one.

Thought is a relative term. A certain set of environments produce a certain set of impressions, which are transmuted into thought in the crucible of the brain. Left a moment beyond the fusing-point, they vanish into so many fragmentary elements. The utmost skill, the most cunning wooing, cannot restore them to the precise state in which they existed when they thrilled and permeated you. Our great writers have availed themselves of this fact of existence, and carried note-book and pencil, eager to catch the message. Men of lesser attainments can afford to do no less. Moments of inspiration are few and precious. Treat them as priceless bequests of ministering spirits. Honor the guest, and reverence the moment by transmitting the thought to paper. That which is written lives. A day, a week, a month may elapse before your brain again becomes a holy tabernacle. No matter. Be thankful that the moments do come. Some day, if you entertain them regally, as befits their worth, they may take up their abode with you. But they demand homage, sincerity. Let no imaginary duties tempt you from bestowing this courtesy, or you may find, to your chagrin, that the duties alone are left you—that the light that makes them beautiful has fled.

When men learn this lesson of self-trust, we will hear no more the cry of dull, witless papers and meaningless sessions. What the world demands, what each heart craves, is your thought, your life, your interpretation of the facts of existence. It matters not when or where it may come to you—in the stillness of the night, in the blazing midday sun, in field or wood or kitchen—entertain it. Transmit it to paper. Give it to the world, after purifying it in the heart.

The Use of Books in Preparing a Paper

If you want to test the moral courage of a man, ask him to write a paper. He may have faced the cannon's mouth; nay, sat down in a dentist's chair with composure; but a paper—he has met his Waterloo. The first instinct of ninety-nine out of every hundred is to flee to some other man's thoughts, and ask through the printed page what are his notions of the matter. Moreover, he will satisfy himself with that, and write his little stint, and lo! when he reads, it is a veritable Joseph's coat, so many unrelated and inharmonious notions does it contain. Better far utter but one sentence than such a medley. One thought vivified with your own experience, incisive with your own personality, is better than dozens of pages of transcript from the thoughts of other men filtered through your brain. The chances are that the essence will be left in the residue, while you furnish thin water only. Honor the thought because it is yours. What a thrill must have shaken the universe when the first man said, "I am. The facts of my existence are facts for all mankind. I will give what I will give." Men dropped on their knees, and inquired. The earth trembled under his tread. He commanded all things. And men since have worshiped him, and inscribed his name on temples and works of art.

Books should suggest, instruct, interpret nature as it appeared to different men under different circumstances, but they should not dominate thought. My books are not books, but congenial spirits who come in and sit down with me. They people my room with living, breathing forms. They give and take. They caress and rebuke. They are lovers. They yield their interpretation of the facts of existence, and I mine. But the moment they presume to dictate my interpretation, or display insolence because I do not agree with them, I lock the door upon them, and they are gone. They may knock until doomsday, but they cannot enter until they promise to be ministering spirits, not commanding generals. They shall not molest my independence. "Always I am I." They have no more right to steal from me my heaven-bestowed heritage to think and inquire than you have warrant to steal my bread or my lands. They shall not bend me to their whims and prejudices, though they forsake me for ever. Gladly do I listen to their notions of this world, and of the disputations concerning the next, but they shall not, dare not, steal from me my inalienable right to read the face of nature as it is revealed to me.

This, I think, is the true attitude in which one should approach a book. Always with reverence if a great spirit has written, for great spirits are gifts of heaven; but never with bent knee or subserviency, but always as a free man, destined to give or take. Then will books serve the ends to which they were written. Then shall men walk erect, free men.

Removal of National Secretary's Office

C. M. Freeman, of Ohio, who was appointed to fill the unexpired term of the late Doctor Trimble, was elected Secretary by the National Grange. The Secretary's office, which for many years was located in Washington, D. C., has been moved to Ohio. All communications should be addressed to C. M. Freeman, Tippecanoe City, Ohio.

Leaders

Each community has its type of leaders—men and women who carry on the church, school, grange, and whatever other good thing is extant. On all sides there are men and women, far in the majority, who criticize and grumble, and afterward fall in line and march under the colors of the generals and lesser officers. "She runs everything in the church," or "He has everything his own way in the grange," cry the grumblers. Meanwhile, outnumbering the workers ten to one, with all the power and force of numbers to their advantage, they cringe and crawl and growl, and the leaders go on, taking up this stupid, inert lump of clay, molding and converting it into power, occasionally for evil, far more often for good, until out of a very dull, unpromising mass is evolved a creditable creation.

It is related of Andrew Jackson that when a young man he ran to a fire. Men rushed hither and thither, doing very little execution save in spending much good wind and letting loose wild gesticulations. Jackson reduced confusion to order, marshaled his men into a water-brigade, and made effectual headway against the fire. One of the growlers sidled up to the owner, and protested against Jackson assuming so much authority, when it was the province of the owner to direct. Finally the owner was prevailed upon to remonstrate. Jackson promptly knocked him down with a bucket, and continued his orders until the building was saved. Everywhere are the leaders and the led, the positive and the negative, the growlers and the doers, the powerful and the weak. Every community has its pint of cream and its gallon of skim-milk; but it is the cream that is measured, that leads, that gives it all it has of glory and renown.

Ohio State Lecturer's Report

John Begg, Columbus Grove, Ohio, made an excellent report at the annual meeting of the Ohio State Grange. Excerpts follow:

"The grange stands for all that is good, pure and noble in life, a synonym for honesty in business, purity in government, and progress. It is recognized by all classes as one of the most powerful agencies for good the country possesses.

"Individualism in business enterprises is a thing of the past. In the industrial world the same conditions exist. Laborers are organized to secure advancement and protection of their rights and interests. With these facts before us, how can the farmer hope to exert and exercise his proper share of influence, either in public or private affairs, when he tries to do single-handed what all other classes combine to do?

"The world honors the individual that looks after his own interests with wisdom and determination. The man who fosters and protects his interests is never pushed aside, or denied the rights and privileges justly belonging to him. The sooner farmers realize this, the better. They must work out their own business and political salvation. They cannot stand back and expect others to do it for them. The farmer of to-day is forced to meet and solve more complex and troublesome questions than did his ancestors. His work calls for exercise of mind and strength. The hardest fight of the present and future will be to secure his just share in the profits of his labor.

"I firmly believe that the organization of the farmers into some union is imperative if they hope to preserve to themselves and posterity their rightful position in business, politics or society. I know of no better form of organization than the noble order to which we belong."

The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

Wife's Share

C. McL., Pennsylvania, wishes to know: "What is the wife's share of property where a man dies intestate, leaving no children?"

If he leaves no children, but other known heirs, she gets one half of the real estate for life. If he leaves no known heirs, she takes it all in fee. Better consult some local attorney.

Exemption Laws of Ohio

F. H., Ohio, inquires: "How do the exemption laws apply to homesteads in the state of Ohio?"

Husband and wife living together, and widow or widower living with an unmarried daughter or unmarried minor son, may hold exempt from sale on judgment or order a family homestead not exceeding one thousand dollars in value. If the homestead is covered by liens, so the same cannot be set off, or if the same has to be sold, then the sum of five hundred dollars may be allowed.

Misspelled Names in Deeds

A. K., Minnesota, asks: "Will you please tell me if two deeds that we have are valid? In mine my name is spelled 'Elmira,' the right way being 'Almira.' In one made for my husband his name is spelled 'Kellog,' the right way being 'Kellogg.'"

The mere fact that the names are not correctly spelled would not affect your title to the property. You might be compelled sometime to prove that you are the identical person whose name is incorrectly spelled, but the change is so slight in the instances you give that I do not apprehend you will ever have any difficulty by reason of it.

Second Wife's Right, etc.

M. J. B., Nebraska, asks: "If a man dies in this state, leaving a wife, and three children by his first wife (all of age), what part of the personal property does she get, and what part of the real estate? Can she sell the real estate, or does she just hold her dower? Do the heirs have to help pay for the tombstone if the widow doesn't let them help choose it?"

The widow gets wearing-apparel, furniture, etc., not exceeding two hundred and fifty dollars in value, and other personal property not exceeding two hundred dollars. She has a mere life estate in one third of the real property. The debts must be paid out of the balance of the personal property, and if this is not sufficient, the real estate must be sold. In that manner the children must help to pay for the tombstone.

Rights of Property

A. C., Illinois, inquires: "A woman dies in Illinois, leaving a husband and children. Can the husband claim any interest in the property she inherited from her parents? Could he if it is deeded to her and her children? If there were no children, would it go to her brothers and sisters? Could she sell, deed or dispose of her property without his signature?"

The surviving husband has a dower—that is, a life estate—in all the real estate of his wife, no matter if it be acquired by purchase or inheritance. If there is no child, one half would go to the husband, and one half to the parents, brothers and sisters of the wife.

Right to Peddle Your Own Products

E. B. S., Louisiana, gives the following: "Will you kindly give me the law of Louisiana relating to a man marketing his own products. For instance, I grow strawberries, and have been selling them to passengers on the trains that stop here for lunch. Can the town council pass a law, and under it stop me from selling my berries at the trains, and will said law be valid? What sort of a charge could they bring against me if I did not obey said law? Will such a law stand a test in a higher court?"

I am not sufficiently familiar with the statutes of Louisiana to know whether there is a special law relating to the subject of your query. Generally speaking, I will say that the right to pass such ordinances as you speak of is vested in the town council or state legislature, to be exercised under what is known as "the police power of the state"—that is, the power to pass laws that will preserve public peace, good order, and result to the welfare of the people generally. Such ordinances are generally known as "hawkers' or peddlers' ordinances," and it has been generally held that a person who merely sells the products of his own farm is neither a "hawker" nor "peddler," and therefore does not come within such ordinances or laws. Some town councils have endeavored to pass ordinances prohibiting farmers and truck-dealers from selling their products from house to house, but they have generally met with such stern opposition that the councils have abandoned their position, and suffered the ordinances to be either repealed or ignored. It has been held "that an ordinance prohibiting farmers, gardeners, etc., from selling vegetables drawn by them in the street without license was an unreasonable ordinance, and could not be enforced."

Inheritance Laws of Illinois

C. N. writes: "I wish to know the inheritance laws of Illinois."

By the laws of Illinois, where a person dies without a will the property goes first to the children and their descendants equally, the children of a deceased child taking the interest of such deceased child. Second, when there is no child, nor descendants of a child, and no widow or surviving husband, then to the parents, brothers and sisters and their descendants equally, allowing each of the parents, if living, a child's part, or the survivor a double portion; and if there is no parent living, then to the brothers and sisters and their descendants. Third, when there is a widow or surviving husband, and no child nor descendant of a child, one half of the real estate and the whole of the personal estate goes to the widow or surviving husband absolutely, and the other half of the real estate descends as any other cases where there are no children or descendants. Fourth, when there is a widow or surviving husband, and also a child or descendant of a child, the widow or surviving husband receives one third of the personal estate absolutely, and a dower estate—that is, a life estate—in one third of the real estate.

Rights Under Will—Parent to Support Child

M. C. K., New York, gives this problem: "A lady wills a farm to two children under age. She gives her sister (who is grandmother to the children) full control of said farm during her lifetime. A guardian is appointed for the children. The said grandmother allows her son to do as he pleases with the farm. He has furnished nothing for his wife or the said children for seven years, and very little food, and is trying to drive the wife away. Now, what I want to know is this: Can the guardian compel the husband to support and clothe the said children? Will the children be deprived of any part of their inheritance by going away from the said farm? Can the father put in any claim against the estate? The father or mother has no interest in the estate under the will. The aforesaid lady wills the farm to her sister's grandchildren, giving the sister full control during her life, and after her death the property to go to the children."

In the case above I presume that the son is the father of the children to whom the property is willed after the death of the son's mother, and as a matter of course the father must support his children. Sometimes when children have an estate and the father has none the court will allow the father something for maintaining them; but in the case you give, the children do not come into possession of anything as long as their grandmother lives. If the father is able, he must support his children. Of course, the grandmother can do with the income of the property as she chooses, but the children's right after her death cannot be taken away from them. Undoubtedly the wife can compel the husband to support her in a proper manner.

Sale of Wife's Property by Husband

G. E. N., Minnesota, asks: "If a woman who has nothing marries a man, and works for fifteen years on a farm, both in the house and field, and they have managed to get a team and several cattle, can the man sell that property without his wife's consent after he has placed it in her name? If so, what part can she claim for the support of herself and children?"

If the husband has placed the property in the wife's name, it shows that he has relinquished his right in the property, and as against all but his creditors the wife's title would be good, and he could not sell it without her consent.

Butchering Outfit

Lessen the labor and save time on butchering day by using the right kind of tools. The

ENTERPRISE Sausage Stuffer

is the best machine on the market. Used equally well as a Lard Press. Cylinder is bored *true* so that no meat can work up about the plate, has patented corrugated spout that prevents air entering the casings. No hot cylinder to handle when pressing lard. Hot cracklings can be removed without burning fingers. Price of four quart size, $5.50. The

ENTERPRISE Meat Chopper

chops quickly, uniformly, perfectly; won't clog, can't break or rust; made in all sizes, hand and power; No. 10 is a good size to work with above Sausage Stuffer. Price $3.00, chops three pounds of meat per minute. Sold at all hardware and general stores. Catalogue free.

The name "Enterprise" is on every machine.

THE ENTERPRISE MFG. CO. OF PA., Philadelphia, Pa.

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LEADING AMERICAN SEED CATALOGUE

Mailed FREE to all who want the BEST SEEDS! An elegant new book of 178 pages with hundreds of illustrations and six superb colored plates, it is now brighter and better than ever before. Many new features for 1904,—including valuable **RARE NOVELTIES** which cannot be had elsewhere. **Write TO-DAY!** A postal card will secure a copy by first mail,—provided you intend to purchase seeds; otherwise the price is ten cents, which is less than cost to us.

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HOLMES SEED CO., Harrisburg, Pa.

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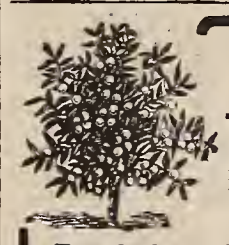
STARK GRAPE NURSERIES are in the heart of the famous Chautauqua Grape Belt, which produces the finest vines grown in the U. S. We have an immense stock of all leading sorts; quality perfect; prices low as those of any reputable grower. Send us your orders—one vine or a car load. A complete line of fruit trees, small fruits, etc. Price List free. STARK BRO'S PORTLAND, N. Y. Louisiana, Mo.



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True to Name

We sell only the best rooted, straight, clean, well branched trees, true to name, at attractive prices.

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New Niagara Peach Trees, 3 to 4 ft. high, at $6.75 per 100. Apple Trees, $6.00 per 100 and up. Standard Pears, $8.00 per 100 and up. Plums, $10.00 per 100 and Cherries, $15.00 per 100 and up. These trees are 4 to 5 feet high and desirable for orchard planting. Send for our new 112-page illustrated catalog. Send us a list of your wants for special prices. We can save you money.

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Mention this paper and get copy of Fruit Magazine free.

Mark the Grave of your departed.

Headstones $4 up
Monuments $11 up

Blue or White Marble nicely lettered. Instructions for setting. Save agent's commission. Send for Catalogue.

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$80 A MONTH SALARY

and all expenses to men with rig to introduce our Guaranteed Poultry Remedies. Year's contract. Bank reference furnished. G. R. Bigler Co., X. 364, Springfield, Ill.

$30 WEEKLY Straight Salary and all expenses to man with rig to introduce our Poultry and Stock Remedies. Send for Contract. We mean business, and furnish best of references. Dept. D, ROYAL CO-OP. MFG. CO., Indianapolis, Ind.

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Pay $40 Cash and $2.80 a Month

A FARM OF ANY SIZE, PAYING ONLY $1.00 AN ACRE DOWN, THE BALANCE IN EASY PAYMENTS TO SUIT YOU.

AFTER A FEW YEARS A COMFORTABLE HOME.

GOOD SOIL. FINE CLIMATE. PURE WATER. These lands are in the Park Region of Central Minnesota—10,000 acres to select from—raising wheat, corn, oats, rye, and the finest vegetables you ever saw. Clover grows without reseeding; a perfect dairy and sheep country, with the markets of Minneapolis and Duluth near at hand. Don't pay rent any longer. You can own a farm. This land now sells for $6 an acre.

You can begin with 40 acres; but if you can pay more you should take 80 or 160 acres; 80 acres would cost you $80 cash and $5.60 a month. Why not begin to-day, if you want a farm. Cut out the Coupon, write your name and address, and I will send you the booklet that will tell you how.

If you want to buy, tell me how much you have to invest and I will submit a list of improved farms or lands to select from.

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MAIL THIS COUPON TODAY

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MINNEAPOLIS MINN.

Send me your booklet telling how I can buy a farm in the timber country of Minnesota, worth $6.00 an acre, by paying $1.00 an acre cash and 7 cents an acre monthly, as advertised in The FARM AND FIRESIDE.

Name.....

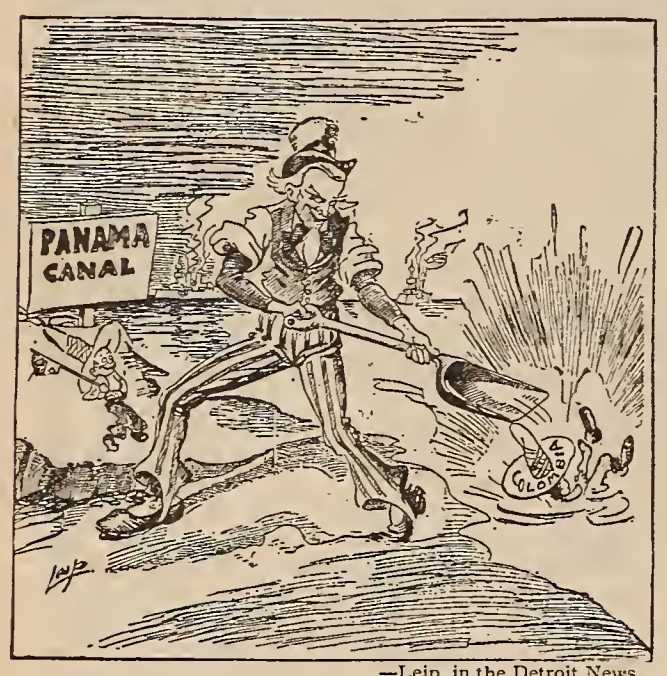
Address.....

(Cut this Coupon out and mail today.)

Important Events of 1903

In many respects the year 1903 was one of the most remarkable in the history of the world. In our own country, particularly, events of importance came thick and fast. Congress in session at the opening of the new year had many matters of moment to act upon. Among other things, it passed a bill for the redemption of Hawaiian silver coins, and the bill suspending the duties on coal for one year, and putting anthracite permanently on the free list, passed both branches. It began also to consider the question of Cuban reciprocity.

On the first day of the year greetings were sent over the new cable from Hawaii to President Roosevelt, and on the eighteenth of January a message of friendly greeting from our chief executive was sent by that mysterious agent, wireless telegraphy, to the king of England. The starting-point on this side was Wellfleet, Mass., and the British receiving-station was Poldhu, Cornwall, England.



—Leip, in the Detroit News.

THE FIRST SHOVELFUL

January 20th Reed Smoot, a Mormon apostle of Utah, was elected to a seat in the United States Senate.

January 22d the Panama Canal Treaty between the United States and Colombia, South America, signed at Washington.

February 11th Congress ratified the Alaskan Boundary Treaty.

February 20th the twenty-fifth anniversary of the accession of Pope Leo XIII. to the Papacy was celebrated with great magnificence at Rome.

February 21st the corner-stone of the Army War College at Washington was laid by President Roosevelt.

February 24th a violent eruption of Colima occurred. Earthquake-shocks were also noticed.

February 24th President Roosevelt signed an agreement with Cuba, by which the United States secured a naval station at Guantanamo and a coaling-station at Bahia Houda.

February 26th occurred the death of Richard Jordan Gatling, inventor of the Gatling gun. Mr. Gatling was eighty years of age at the time of his death.

March 3d, being the anniversary of the coronation of Pope Leo XIII., was a great day in Rome.

March 18th the Anthracite Strike Commission submitted its report to President Roosevelt.

March 20th the Mississippi River reached the greatest height ever known at New Orleans.

March 26th the French Chamber of Deputies, by a vote of three hundred and thirty-eight to two hundred and thirty-one, refused to permit the Carthusian monks to remain in France.

March 28th revolutions broke out in San Domingo and in Managua, the capital of Nicaragua.

March 28th the Cuban Senate adopted the reciprocity treaty as amended by the United States Senate, and ratifications of the treaty were exchanged two days later.

On this date, also, a statue of William E. Gladstone was placed in Westminster Abbey.

March 29th Dean Farrar of Canterbury died at the age of seventy-two, and the same day Gustavus Franklin Swift, president of Swift & Company, packers, of Chicago, passed away.

April 7th Carter H. Harrison was reelected Mayor of Chicago.

April 8th King Christian of Denmark celebrated his eighty-fifth birthday.

April 20th the Reading Coal and Iron Company ordered a lockout in two thirds of its colleries because of the refusal of the men to work nine hours on Saturday.

April 21st officials of the United Mine Workers ordered all coal-miners out on a strike or locked out to return to work pending adjustment of grievances by a joint conciliation board.

April 22d the San Domingo revolutionists succeeded in overthrowing the government of President Vasquez, and establishing a provisional government under A. Wos-Gil.

April 25th Andrew Carnegie gave one million five hundred thousand dollars for the erection of a Temple of Peace for the Hague Court of Arbitration.

April 30th President Roosevelt and Ex-President Cleveland made the principal addresses at the dedication of the Louisiana Purchase Exposition Buildings at St. Louis.

May 1st the new law providing that no child under ten years of age can work in any cotton-mill went into effect throughout South Carolina.

July 4th the first message around the world was sent over the New Pacific cable from San Francisco to Manila by President Roosevelt at Oyster Bay.

July 14th the United States invited the Czar of Russia to appoint from the members of the Hague Court three arbitrators to settle the questions submitted under the Venezuelan Claims Treaty.

July 20th Pope Leo XIII. died.

July 20th the Philippine government began the circulation of the new currency authorized by Congress.

September 29th Alderman Sir T. J. Ritchie was elected Lord Mayor of London for the ensuing year.

October 5th the Grand Jury at Washington, D. C., returned fifteen indictments in the postal-fraud cases.

—From the Minneapolis Times.

INDEED WE HAVE A STRING ON OUR PACIFIC POSSESSIONS

October 15th a statue of General Sherman was unveiled at Washington.

October 20th the award of the Alaskan Boundary Tribunal in London sustained all the main contentions of the United States, and gave to Canada Pearse Island and a few other small islands located in the Portland Canal.

October 28th Mrs. Emma Booth-Tucker, consul in America of the Salvation Army, was killed in a railroad accident.

October 28th the United States Cruiser "Baltimore" was ordered to San Domingo to protect American interests.

November 3d Panama's independence of Colombia was proclaimed. Government officials were seized and imprisoned.

November 4th, pending the adoption of a constitution, the insurgent government of Panama was placed in the hands of a junta composed of Jose Augustin Arango, Frederica Boyd and Thomas Arias; a provisional cabinet was reported; the United States authorities forbade the transportation of troops of either of the combatants on the Panama railroad.

November 5th the Colombian troops sailed from Colon for Cartagena.

November 6th the United States government formally recognized, and entered into relations with, the new republic of Panama.

November 9th the provisional government of Panama appointed a commission to negotiate a canal treaty with the United States.

November 10th the new republic of Panama was recognized by France.

November 12th three thousand Chicago street-railway employees go on a strike.

November 12th an air-ship designed by the Lebaudy Brothers reached an average speed of twenty-seven and one fourth miles an hour over a course of forty-six miles.

November 13th Andrew H. Green, "father of Greater New York," died at the age of eighty-three.

November 13th M. Bunau-Varilla was formally received at Washington as the minister of the new republic of Panama to the United States.

November 16th a formal protest from Colombia against the action of the United States in regard to Panama was received at Washington.

November 18th an Isthmian Canal Treaty was signed at Washington by Secretary Hay and M. Bunau-Varilla, the minister of the republic of Panama.

December 2d the Isthmian Canal Treaty with the United States, which was received in Panama on the first, was unanimously signed by the members of the Junta without any amendment. The news was immediately cabled to Minister Bunau-Varilla at Washington, who immediately informed Secretary Hay of the facts.

December 5th Secretary Root's annual report of the operations of the War Department showed that there is cheerfulness and good-will among the army officers.

December 7th President Roosevelt's message was sent to Congress. The message in brief was as follows:

President Roosevelt said that the Department of Commerce and Labor will go far toward solving the trust problem; recommended that a commission be appointed by Congress to investigate and report on the needs of American shipping; wanted an appropriation made by Congress for the purpose of prosecuting officials who have defrauded the government; wanted treaties with foreign countries making bribery an extraditable offense; said that the result of the Alaska boundary decision is satisfactory to the United States; declared that there is no question concerning the integrity of our currency, and that no financial legislation is needed; stated that we cannot have too much immigration of the right kind, but that system should be devised whereby undesirable immigrants may be kept out entirely; recommended new tariff arrangement for the Philippines; said that relations with all foreign countries are friendly; asked that further steps be taken to bring about international arbitration; declared that rural free delivery system should be extended as far as possible; made recommendation for the betterment of the army and navy; defended action taken in the recognition of Panama, and said that it has not been necessary to consider the Nicaraguan route; recommended passage of laws for the preservation of forests and the extension of irrigation in the Far West.

L. K. W.

For the data used in this article we are indebted largely to the "Review of Reviews" and the daily press.

—Philadelphia North American.

John Bull—"Yes, 'e's makin' a lot o' noise, Sam, but 'e'll get over it."

What is Catarrh?

If You Have Any of the Following Symptoms Send Your Name and Address To-day.

Is your breath foul? Is your voice husky? Is your nose stopped? Do you snore at night? Do you sneeze a great deal? Do you have frequent pains in the forehead?

Do you have pains across the eyes? Are you losing your sense of smell? Is there a dropping in the throat? Are you losing your sense of taste? Are you gradually getting deaf? Do you hear buzzing sounds? Do you have ringing in the ears? Do you suffer with nausea of the stomach? Is there a constant bad taste in the mouth? Do you have a hacking cough? Do you cough at night? Do you take cold easily? If so, you have catarrh.

Catarrh is not only dangerous in this way, but it causes ulcerations, death and decay of bones, loss of thinking and reasoning power, kills ambition and energy, often causes loss of appetite, indigestion, dyspepsia, raw throat, and reaches to general debility, idiocy and insanity. It needs

attention at once. Cure it with Gauss' Catarrh Cure. It is a quick, radical, permanent cure, because it rids the system of the poison-germs that cause catarrh.

In order to prove to all who are suffering from this dangerous and loathsome disease that Gauss' Catarrh Cure will actually cure any case of catarrh quickly, I will send a trial package by mail free of all cost. Send us your name and address to-day, and the treatment will be sent you by return mail. Try it. It will positively cure, so that you will be welcomed instead of shunned by your friends. Write to-day; you may forget it to-morrow. C. E. GAUSS, 2022 Main Street, Marshall, Michigan.

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FOR $7.75 We sell this High Arm 5-Drawer Drop Head Oak Cabinet Sewing Machine, such as others sell at $15.00 to $25.00. We sell Singer, Wheeler & Wilson, New Home, White and other high grade machines at astonishingly low prices. For the most liberal terms ever made, our Three Months' Free Trial Plan, and for our Pay After Received Offer, cut out and return this ad and our free Sewing Machine Catalogue, the handsomest, largest and most complete sewing machine catalogue ever published will be sent by mail, postpaid. Don't buy a sewing machine until you get this free catalogue and our astonishingly liberal offer. Address,
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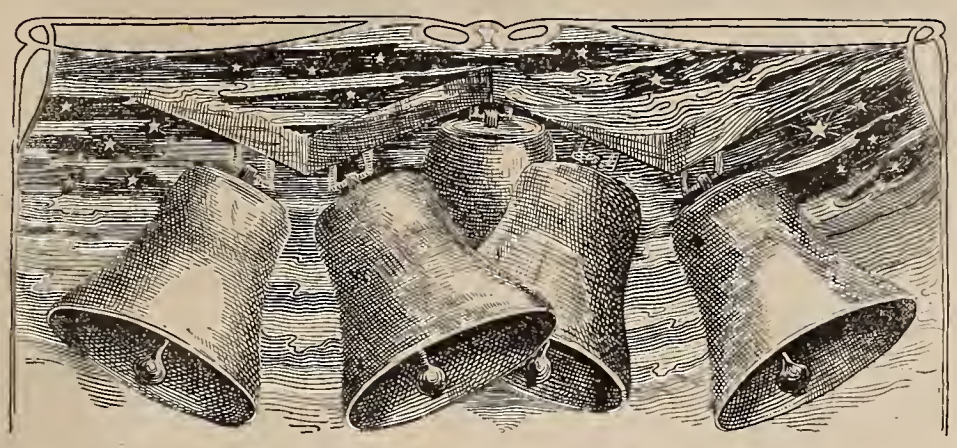
Around the Fireside



"Ring Out, Wild Bells"

Ring out, wild bells, to the wild sky,
The flying cloud, the frosty light;
The year is dying in the night;
Ring out, wild bells, and let him die.

Ring out the old, ring in the new,
Ring, happy bells, across the snow;
The year is going, let him go;
Ring out the false, ring in the true.

Ring out the grief that saps the mind,
For those that here we see no more;
Ring out the feud of rich and poor,
Ring in redress to all mankind.

Ring out a slowly dying cause.
And ancient forms of party strife;
Ring in the nobler modes of life,
With sweeter manners, purer laws.

Ring out the want, the care, the sin,
The faithless coldness of the times;
Ring out, ring out my mournful rhymes,
But ring the fuller minstrel in.

Ring out false pride in place and blood,
The civic slander and the spite;
Ring in the love of truth and right,
Ring in the common love of good.

Ring out old shapes of foul disease;
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace.

Ring in the valiant man and free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be.

—Canto CVI., of "In Memoriam," by Alfred Tennyson.

About Panama

THE commerce of Panama, according to the latest available data, amounts to about three million dollars per annum, its population to about three hundred thousand, and its area to thirty-one thousand five hundred and seventy-one square miles, or nearly equal to that of the state of Indiana. The estimate of the population is based upon the latest official calculation, which shows the population in 1881, and was based upon the census of 1871, while the figures of area are from accepted geographical authorities, and are those of the area of the "Department of Panama" of the Colombian Republic. The principal ports are Panama, on the Pacific coast, and Colon, on the Atlantic side, and these ports are visited annually by more than one thousand vessels, which land over one million tons of merchandise and nearly one hundred thousand passengers, chiefly for transfer over the Panama Railway, forty-seven miles in length, connecting the Pacific port of Panama with the Atlantic port of Colon.

Colon, or Aspinwall, as it is sometimes called, has a population of about three thousand persons. The city of Panama has a population of about twenty-five thousand. It was founded in 1519, burned in 1671, and rebuilt in 1673, while Colon was founded in 1855.

THE PEOPLE

The population, which, as already indicated, amounts in number to about three hundred thousand, is composed of various elements—Spanish, Indian, negro, and a limited number of persons from the European countries and the United States, especially those engaged in commerce and transportation and the operation of the Panama Railway. A considerable number of the population is composed of persons brought to the isthmus as laborers for the construction of the canal, and of their descendants. Since the abolition of slavery in Jamaica a considerable number of blacks and mulattoes have settled on the isthmus as small dealers and farmers, and in some villages on the Atlantic side are said to be in the majority. As a result the English language is much in use, especially on the Atlantic side. Some of the native population have retained their customs, speech and physical type, especially those in the western part of the province, and claim to be descendants of the aborigines.

OUR TRADE WITH PANAMA

The United States supplies a larger share of Panama's commerce than any other country. The importations at the port of Colon during the fiscal year ended June 30, 1903, as shown by the report of the United States consul, amounted to $952,684, of which $614,179 was from the United States, $119,086 from France, $118,322 from England, and $76,386 from Germany. The exports to the United States from Colon in 1903 amounted to $173,370. From the port of Panama the exports to the United States in the fiscal year 1903 amounted to $193,342.

HOW TO GET THERE

Panama is connected with San Francisco by a weekly steamer schedule operated by the Pacific Mail Steamship Company, and with Valparaiso by a weekly steamer schedule operated by the Pacific Steam Navigation Company and South-American Steamship Company. Two passenger and two freight trains run daily each way between Colon and Panama, the passenger-trains traversing the forty-seven miles in three hours.

From Panama there is one cable line north to American ports, and one to the south. The actual time consumed in communicating with the United States and receiving an answer is stated by the consul to be usually about four hours. There are also cable lines from Colon to the United States and Europe.

The money of the country is silver, the rate of exchange having averaged during the past year about one hundred and fifty per cent.—Harper's Weekly.

Tombs of Ancient Kings

In an European journal the announcement is made of the discovery of two important tombs in Persia. One of these is the tomb of Cyrus, who gave permission to the Hebrews, after their seventy years of captivity, to return and rebuild Jerusalem. The tomb was known in Persia as that of the mother of Solomon. Inscriptions, however, discovered by two travelers prove it to have been the veritable tomb of Cyrus. It stands on seven courses of white limestone, composed of enormous blocks. The walls and ceiling consist of similar blocks beautifully fitted together. It was originally surrounded by a colonnade, the bases of the columns of which are still visible. The second discovery was made near Puzeh, where four tombs were found. One of them is undoubtedly that of Darius, the patron of Daniel. Its date is said to be about 485 B.C. An inscription in three languages was found, which clearly identifies the tomb as that of the king who was outwitted by the princes, and induced to sign the decree which sent Daniel to the den of lions, where he was miraculously preserved. All four tombs are cut out of the solid rock; the others are believed to be those of Xerxes, Artaxerxes and Darius II. They are not so elaborate as the tomb of Darius, and there are no inscriptions to indicate for whom they were constructed, but there is a strong presumption that they were for the above-mentioned potentates. All the tombs, including that of Cyrus, have been broken open, and their contents carried away. It is, however, something to have seen the stone receptacles of the bodies of kings so celebrated in secular as well as in biblical history. It is now twenty-three centuries since the latest of those kings was laid in the sepulcher now identified; but though empires have risen and fallen, and powerful dynasties have passed away since then, the words he uttered in solemn proclamation to his people still remain the watchword of history, true in all past time, and true through all eternity:

"He is the living God, steadfast for ever, and his kingdom that which shall not be destroyed, and his dominion shall be unto the end (Daniel vi. 26)."—Christian Herald.

THE RECENTLY DISCOVERED TOMB OF CYRUS

TOMBS OF DARIUS AND HIS ROYAL SUCCESSORS

A New Method of Mining Gold

An invention which has been recently announced as the work of Thomas A. Edison is an appliance for extracting the gold in placer sands. Heretofore this has been accomplished by a process known as "washing." The ore sand is washed by a current of water through a riffle. Here the gold particles sink because of their heavier weight, being collected by cleats at the bottom of the riffle.

In many parts of the world, however, there are great areas, rich in gold deposits, and yet lacking in water, so that some other method was found necessary. Although space is too short to describe fully Mr. Edison's invention, we can perhaps give the reader an idea of the principle on which it works. A powerful and evenly distributed current of air is forced through a shaft directly against a falling sheet of placer sand. By means of this the lighter particles, which are useless, are blown into a distant set of shutters, and so directed into a discharge-hopper, while the heavier grains of gold and particles of ore are collected in nearer receptacles.

As this fine dust represents a large proportion of the gold in the earth, the successful extraction of it is a very important process, and one which would render gold-mining a profitable pursuit in many new localities.—Youth.

The Origin of the Thimble

Thimbles were invented by a Dutchman, and were first brought to England in 1695. In those early days it was the custom to wear them on the thumb, from which they took the name of thumble, since corrupted into thimble. When known by the former name they were made of brass or iron, and it was left to a more luxurious age to have them manufactured of gold, silver, horn, glass and mother-of-pearl. These latter are to be found in China, exquisitely carved, and ornamented with rim and top of gold. In Italy thimbles are made of silver gilt studded around the rim with turquoises, and a gold thimble set in like manner with diamonds and rubies is often to be found in a list of wedding presents. No less a person than the King of Siam had one made expressly for his bride, fashioned in the shape of a lotus-bud. It was thickly studded with diamonds spelling the queen's name.—The Southwestern Presbyterian.

Interesting Facts

An African prince is to attend school in Winfield, Kan., for the next two years. King Lewanica of Basutoland has two sons attending school in England, and a third in Australia, and desires the fourth to come to America to learn the ways of this country. The young prince will board with a colored family.

A fruit supposed "by some" to bear the mark of Eve's teeth is one of the many botanical curiosities of Ceylon. The tree on which it grows is known by the significant name of "the forbidden fruit," or "Eve's apple-tree." The fruit is beautiful, and hangs from the tree in a peculiar manner. Orange on the outside and deep crimson within, each fruit has the appearance of having had a piece bitten out of it.—Everywhere.

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THE MARK
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Sickle grinding, saw gumming and polishing rusty tools are reduced to exact science for all people with the
Bi-Pedal Sickle and Tool Grinder.
Simple and easy to grind right, getting proper bevel. Geared like a bicycle, 4,000 revolutions of wheel per minute. The wonderful Carborundum Grinding Wheel is 8 times as efficient as emery. Does not draw temper. Special offer to farmers. $34 worth of machinery for $8.50. Ten days free trial. Return at our expense if not satisfied. Live agents wanted, a rare chance. Ask for free carborundum sample and book.
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Not a drop can touch you when your buggy is closed up by the
Blizzard Storm Front
Patented in United States and Canada.
Fits any buggy. Adjusted in 30 seconds without getting out, sides open and close easily, large line pocket. Window, 12x20 inches, of pliable material that won't break. Rubber cloth, $3; heavy, $3.50
Trade-mark "Blizzard" is stamped on inside under window.
If your dealer hasn't it, write us. Illustrated booklet free.
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BUGGIES ON FREE TRIAL.
$19.50 buys this handsome, new 1904 Model Open Buggy, all complete. Rubber tires, $9.00 extra.
$24.90 buys this new, 1904 Style Top Buggy, complete with everything. Rubber tires, if wanted, $9.00 extra.
$42.90 buys this big, handsome, new 1904 Style Canopy Top Surrey, all complete.
$30.75 buys this big, strong, latest style, full half platform Spring Wagon, complete with two seats, everything all complete.
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WE'LL PAY THE FREIGHT
and send 4 Buggy Wheels, Steel Tire on, - $7.25
With Rubber Tires, $15.00. I mfg. wheels ¾ to 4 in. tread. Top Buggies, $28.75; Harness, $3.60. Write for catalogue. Learn how to buy vehicles and parts direct. Wagon Umbrella FREE. W. F. BOOB, Cincinnati, O.

$60 MONTH Expenses advanced, District Managers to travel and leave samples at stores.
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The Housewife

Little Household Helps

OIL-CLOTH and linoleum may be kept fresh and clean-looking if when sweeping the broom is dipped in warm salt water, to acquire a proper degree of dampness. This is quite as satisfactory and not so laborious as the old way of washing up the floor on one's hands and knees, and is even an improvement on a mop, as it performs the double operation of sweeping and cleaning at the same time, lessening this work one half.

When dressing a chicken or other fowl, instead of opening it upon a board, a newspaper may be used to hold the waste contents. These may be thrown out and the paper burned, or if no such disposition can be made of them, the paper and refuse may all be thrown into the fire, leaving no trace of the operation and no troublesome cleaning-up to be done.

If you cook over a wood fire, at night, when preparing the kindling for the morning blaze, place with it a mixture of large and small bits of paper, etc., on an open newspaper, and roll into a long package. In the morning put this package into the stove, apply a lighted match, and one minute after you enter your kitchen you will have a fine fire burning in the stove, and there will be no trace of kindling or dirt about it.

The custom of excluding the light from jars of fruit by wrapping them in paper is an old one. The work may be simplified by using in place of paper bags the empty boxes which have contained the more bulky forms of breakfast-foods. There could often be an accumulation of the boxes sufficient to meet the demands of one season.

Scrub the porches on wash-day, using for the purpose the cleaner suds after the clothes are out on the line; then throw over the cleaned boards the rinse-water, and sweep all off. The cleansing will be more permanent than if done by the use of cold water alone.

If drying clothes are folded right from the line or bleaching-ground, one handling will do the work, no sprinkling is necessary, and the results are more satisfactory in the ironing, because there are fewer wrinkles to be smoothed away.

SUE H. MCSPARRAN.

Asbestos

I did not know until recently that asbestos could be bought by the yard, and that it can be used for "the thousand and one things" that useful articles are proverbially supposed to be good for. It comes a yard square, and is very cheap; you will be surprised to see how much you will get for a quarter. You can cut it to suit your needs. There are many ways of using this material besides the one of placing on the range beneath sauce-pans and other cooking-utensils to prevent the contents from burning.

In place of the ready-made pads for protecting the dining-room table, asbestos bought the desired length makes a most satisfactory and durable "hush-cloth." If a small piece of the asbestos is placed beneath the cloth where the coffee-pot and tea-pot stand, the table will be saved from the white marks which even the tile does not prevent.

We all know that fruit-cake requires some time to bake properly. The fire must neither be too hot nor too slow, and great care must be taken to prevent it from burning. If a piece of asbestos is laid lightly over the pan, the cake will not be scorched, nor will the asbestos burn, as paper sometimes does.

This material makes an excellent flat-iron rest, and can be used to advantage in the folds of the iron-holder, when the old-fashioned irons are used. If the gasoline stove or range is near the wall, place a strip of the asbestos between the stove and the wall. If the floor is cold, warm a piece of asbestos, and stand on it while at work.

ELLA BARTLETT SIMMONS.

Grape Design for Doily

The charming little doily illustrated is worked on white linen in shades of green and brown for the leaves, green alone being used for the grapes. The leaves and grapes may be colored with India ink, or cut from cretonne and appliquéd on with a long-and-short buttonhole-stitch. A dainty Battenberg border is used. Nothing adds more to the appearance of snowy napery than a tasteful use of dainty doilies. This one is particularly suitable, being a fruit-design effect carried out in the natural grape and foliage colors. The housewife who is anxious to keep her husband's regard should remember that the man of fine feeling "does not live by bread alone," but that his esthetic tastes must be remembered also. O. M.

DOILY IN GRAPE DESIGN

Polly's Gone Away to School

BY ELIZABETH CLARKE HARDY

Jest a-wanderin' here an' there,
Huntin' something everywhere;
Pokin' 'round the livelong day
'Thout a single word to say;
Leanin' on the fence a spell,
Thinkin' maybe I ain't well,
Feelin' like a pesky fool—
Polly's gone away to school.

House so vacant now, an' still,
Lonesome-like, go where you will;
Nothing cheerin' any more
In the house or out of door;
Things don't taste good, appertite
Ain't what 'twas, by tarnal sight,
When I used to see her face
Smilin' at me from her place.

Strange one little girl could make
Sech a diff'rence. Massy sake!
Ef I'd knowed jest how 'twould be,
Bet yer life she'd stayed with me.
Course I know girls hev to l'arn
Things they can't out on the farm—
Cryin'? Sho, you tarnal fool—
Polly's gone away to school!

PANSY SOFA-PILLOW

The Way of the Neighbor

"How is your husband?" I asked my neighbor.

"He's getting on pretty well since his foot was hurt, but he's driving me distracted. Nothing we have to eat seems to suit him. I wish you'd tell me something appetizing."

I thought for a few minutes. "Can he eat what he likes?" I asked.

"Oh, yes; the doctor said he might have anything."

"Our boys are especially fond of fresh gingerbread, and I made some to-day. Do you suppose he would relish some? I have such a good recipe."

"I'm sure he would!"

An hour later I sent my neighbor a plate of spicy brown squares "to be eaten without delay."

"They were perfectly delicious," she pronounced. "My husband wants me to get the recipe from you right away."

To avoid any possible error, I made a type-written copy of the directions, and from that copy made a "batch" for home consumption, with my usual success; then I took the recipe across the street to my neighbor.

"Measure the quantities exactly as they are given," I cautioned her. "If you do that you can't fail to have it just like that I sent you. I've tried it more times than I can count, and it's always the same. The only time it ever 'went back on me' was when I was called away from the kitchen, and it got too brown in the oven."

"I am ever so much obliged to you," she said. Here is the recipe I gave her:

SPICED GINGERBREAD.—One cupful of molasses, one cupful of brown sugar, one half cupful of shortening (lard, or lard and butter mixed), three and one half cupfuls of bread-flour or four cupfuls of pastry-flour, one cupful of sour milk, three eggs, one teaspoonful of salt, one half teaspoonful of baking-soda, one rounded tablespoonful of ginger, one rounded tablespoonful of cinnamon, one even teaspoonful of ground mace or nutmeg, one even teaspoonful of cloves and allspice mixed.

Put the molasses, sugar and shortening over the fire. As soon as they boil, take them off, and stir in the spice. Mix the salt through the flour, and pour the hot molasses over it. Stir well, and mix in the milk. Beat the eggs without separating, and pour in, stirring quickly. Lastly add the soda, dissolved in a little cold water. Bake in a moderate oven. A large thin sheet will bake quickly, and will not burn so readily as a thicker loaf. If you put raisins in, to make it extra good, use one half cupful, seeded, and flour them with some of the flour already measured, instead of taking extra, which would make it too stiff. If eggs are scarce, two will be enough.

Two days later I was sitting on her porch steps. "Have you tried the gingerbread yet?" I asked.

"Why, yes," she answered; "but do you know, it was so heavy and soggy that my husband wouldn't touch it!"

"Why," I said, wondering, "I can't understand what could have been wrong! I took the recipe after I had copied it for you, and from the copy I made some for our own lunch, and it was all right. Did you use just the quantities I set down?"

"We-ell," she began, "I didn't use quite so much shortening. I was afraid it would be too rich. We don't like things too rich. And I used a little more flour—"

My neighbor's husband, sitting in the shadow, looked at me. And I? I thought for a few minutes very hard.

EMILY GORDON.

Pansy Sofa-Pillow

Among the most desirable novelties in sofa-pillows are those round in shape, with white linen cover and puff. For the pansy sofa-pillow illustrated the pansies are cut from cretonne, and put on with a long-and-short buttonhole-stitch in all shades of the pansy. The scalloped border is buttonholed in purple, the puff is lavender, and the scallops of the top and bottom are tied together with two shades of baby-ribbon. O. M.

A Pansy Emery

The merit of striking novelty can hardly be claimed for this convenient trifle, but it is newer than the scarlet fruits—supposed to be strawberries—in the guise of which emeries are so frequently made. To make the emery-bag proper, use a bit of very firm muslin or dress-lining about two inches long and a little over one inch wide. Double this in the middle, and turning in the width of a seam at the sides and ends, sew the sides together with the finest and closest of over-and-over stitches; for close sewing is absolutely necessary to hold the emery. There is probably an old emery in somebody's work-basket that would be benefited by a new covering, or you can get a new and inexpensive "strawberry" in order to procure the filling for your tiny bag. In either case cut an opening in the smaller end of the bag you wish to reject, draw your new one over this, and gently poke and squeeze until the contents are transferred—emery is not pleasant stuff to handle—then draw the ends very tightly together, like a bag, and sew securely.

The next step is the ribbon covering. This is of satin one inch in width, and three pieces will be needed—one of royal purple four inches long, and two of pale yellow, one of which is two inches, the other one inch, in length. The purple strip is doubled over the little bag, and overhanded together with sewing-silk to match. When this is done, and the ends drawn together, the appearance of the work should be like No. 1 in the illustration. The bag may, however, be shorter in proportion to its width if you have only a small quantity of emery; then, of course, the bit of ribbon would be cut a little shorter. Open out and turn back the ends of the ribbon, trim them in shape with a pair of sharp scissors, and arrange them as in No. 2, to suggest the upper petals of a pansy. Next shape one end of the shorter piece of yellow, and near the other end mark with a pen and ink several lines to suggest the "beard." Gather this inner end, and fasten to the junction of the purple petals, using pale green sewing-silk; see No. 4. Then, without detaching the thread, run your needle crosswise through the center of the other yellow strip—first shaping, and marking it with ink like No. 3—draw it up until it occupies the correct position in relation to the other petals, and sew in place. You need not be afraid of your stitches showing—take care only that they are taken crosswise of the petals—and for the "fastening-off," take one short stitch directly in the center of the finished flower, a second in the same place right over the first, a third over the second, and then put the needle down through the little bag, drawing the silk after it, and cut the latter close to the surface as it emerges.

If you prefer a pansy all of one color, it is easy to substitute rich gold-color for the purple and pale yellow ribbons; or if you have some bits of lavender ribbon, you can make a beautiful one with touches of yellow paint, if you handle the brush, or with long stitches of gold-colored floss, for the markings in the center.—Isabel Carter, in The Modern Priscilla.

A PANSY EMERY

The Housewife

A Group of Smart Collars

No. 1.—This dainty collar is made of white linen, with white lawn lining, and edged with a fine finishing-braid, embroidered with color—pink on a white ground. Ornament the front with one large and two small Battenberg rings, applied with a fancy stitch in colored floss, so that it may correspond with the braid border.

No. 2.—This collar is cut from white linen, and stayed on the sides and up each side of the back with featherbone. It is embroidered in a trailing design in red and black, and finished with a binding of the material stitched in white.

No. 3.—This collar is of white linen stitched in black, a band at the top, and a slightly narrower one at the bottom, ending in tabs, with a corresponding one attached to the center of the collar by means of two small Battenberg rings. A larger ring ornaments the ends of each tab. In order to avoid a clumsy appearance, the collar and ends are lined with thin white material, concealing the edge of the linen.

No. 4.—This stock consists of a white linen foundation ornamented with a band, and top tab of blue linen, held in place with two Battenberg buttons.

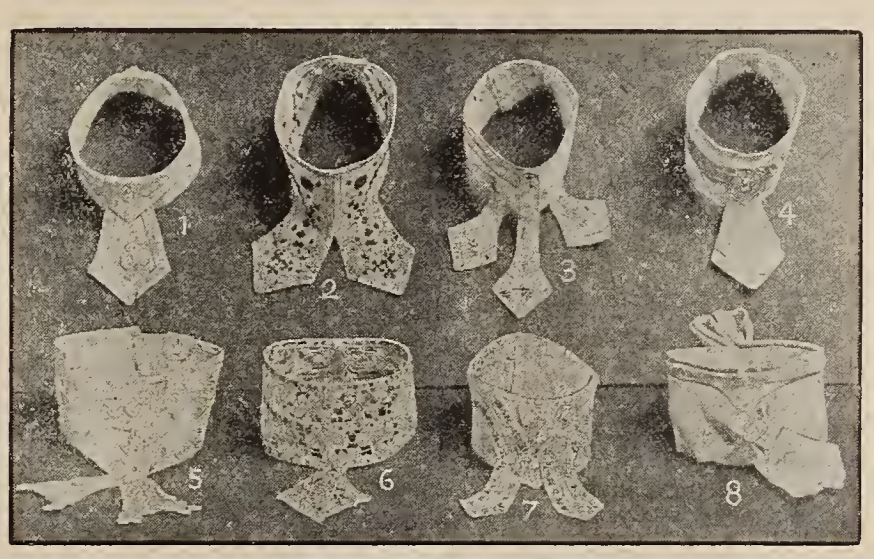
No. 5.—This collar is cut from white mercerized wash-goods or silk, and is trimmed with heavy white lace appliqué.

No. 6.—On bands of fancy braid or narrow ribbon made to conform to a well-fitted collar-pattern apply any heavy lace so as to form a small square tab in front. Featherbone the sides and back, to keep the soft material from crushing, and thus detract from the stylish effect otherwise obtained. A color introduced by means of the bands showing through the meshes of the lace is quite attractive.

No. 7.—This stock is made of white linen, edged around with red embroidered finishing-braid of exceedingly fine quality.

No. 8.—A yard or more of soft-finished white satin ribbon (same on both sides) about four inches wide is required for this very attractive piece of neckwear. Take the ribbon around the neck the required size, then fold back each end in the back over white silk featherbone, and stitch neatly. Bring the ends forward to the front, and connect and hold in place by means of a dainty buckle or pin. Finish the top with a milliner's fold of light blue velvet, ending with several short loops in the back.

HEISTER ELLIOTT.



A GROUP OF SMART COLLARS

Cakes for New-Year's

LADY'S-FINGERS. — Beat to a cream the yolks of six eggs and one half pound of confectioners' sugar; beat the whites to a stiff froth, and mix in lightly one fourth of a pound of sifted flour. Fold the two mixtures together quickly and lightly, and bake in lady's-finger molds in a moderate oven until a very light brown. If no lady's-finger molds are at hand, line a baking-pan with white paper, and put the batter through a pastry-tube, making them smaller in the center than at the ends. Dust with powdered sugar, and bake.

CHOCOLATE MACAROONS.—Mix together one half pound of powdered sugar, one fourth of a pound of grated chocolate, one teaspoonful of vanilla extract, and the stiffly whipped whites of two eggs. Drop from a spoon on a tin covered with white paper, and bake in a very moderate oven for fifteen minutes.

ALMOND MACAROONS.—Blanch one fourth of a pound of sweet almonds, mixing with them a few bitter almonds. Pound to a smooth paste in a mortar, adding a few drops of rose-water when the almonds begin to look oily. When the mixture is reduced to a smooth paste, add the stiffly whipped white of an egg, and mix thoroughly. Beat two more whites of eggs to a firm snow, and fold into this one fourth of a pound of powdered sugar, then add to the almonds and white of egg already mixed. When the mixture is smooth, stir in another one fourth of a pound of powdered sugar; stir until the paste looks creamy and is of the consistency of soft dough. If too thin it will spread when baked, and if too thick it will be heavy. It is safer to bake one or two macaroons, to try them. When the paste is right, form into little balls with a knife, and lay on a paper slightly wet with a brush. Bake in a very moderate oven, with the heat greater at the top than at the bottom.

COCOANUT CONES.—Separate the whites from the yolks of three eggs, and beat the whites to a very stiff froth, then fold in lightly one half pound of powdered sugar and six ounces of prepared shredded cocoanut. Take out one teaspoonful of the mixture at a time, and form it quickly into a little cone; place on buttered paper, and bake in a quick oven until the tips of the cones are a golden brown.

ALMOND CAKE.—Wash one pound of butter, and stir it to a cream; add gradually one half pound of sugar, two eggs and one and one half pounds of sifted flour. Roll out thin, and cut into small round cakes. Wash with the yolk of an egg beaten with one tablespoonful of sugar, and strew thickly with blanched and chopped almonds.

PEPPER-NUTS.—Separate three eggs; beat the yolks until thick, and the whites to a stiff froth, then mix lightly together. Beat in gradually one pound of sugar, and nuts, fruits and spices to taste, and add a pinch of salt. Sift three cupfuls of flour two or three times with two teaspoonfuls of baking-powder, then mix it in the batter until the dough looks crumbly. Pinch off small pieces of the dough about the size of hickory-nuts, and place them on buttered tins without touching; dust them with powdered sugar, and bake in a moderately hot oven for about twenty minutes.

ORANGE-BLOSSOMS.—Stir together for thirty minutes one pound of sugar, three whole eggs and four yolks. Add sufficient flour to make a batter stiff enough to make cakes that may be laid on a baking-tin with a spoon. Flavor with orange-flower water, and bake in a quick oven. When cool cover with white frosting, with a little orange-colored icing in the center.

SCOTCH SHORT-BREAD.—Rub together into a stiff, short paste two pounds of flour, one pound of butter and six ounces of pounded loaf-sugar. Make it into square cakes about one half inch thick. Pinch them all along the edge of the top, and sprinkle white comfits all over the surface of the top. With thin strips of candied lemon-peel or citron spell out across the cake "A Happy New-Year," and bake on tins in a slow oven.

ROSE-LEAVES.—Cream together two cupfuls of white sugar and one cupful of butter; add the stiffly beaten whites of four eggs, two cupfuls of sweet milk, two teaspoonfuls of baking-powder, one teaspoonful of rose extract, and sufficient flour to make a rather stiff batter. Drop in spoonfuls about one inch apart on an oiled tin, and bake in a quick oven. Color white icing a delicate pink with a little cochineal or red sugar, flavor with rose extract, and spread smoothly over the cakes.

NEW-YEAR'S CAKE.—Cream together one pound of butter and one pound of sugar; add the yolks of twelve eggs, then alternately, a little at a time, one pound of sifted flour and the whipped whites of the eggs. Mix two pounds of seeded raisins, two pounds of currants, one half pound of mixed candied peel cut in thin strips, one pound of blanched and coarsely chopped almonds or English walnuts, one grated nutmeg, one teaspoonful of allspice and one half teaspoonful of cloves. Mix well with the batter, and add one teacupful of grape-juice or diluted grape jelly. Line the pans with buttered paper, pour in the batter, and bake for four hours in a moderate oven. Cover with white or pink frosting, garnish with halved English-walnut meats, and place in the center a candy figure of the baby New-Year.

MARY FOSTER SNIDER.

Two Good Recipes

STUFFING OR DRESSING.—Every one has a particular method of making the old-time dressing, but the following recipe has been tried so often, with never a failure, that I give it with confidence:

Take sufficient bread-crumbs to dress an ordinary fowl, and pour tepid water over them (not warm, nor hot, for that makes them heavy). Let this stand for a few minutes, then take up a handful at a time, and squeeze out all the water, placing it as it is squeezed out into another vessel. This makes it light. After all is pressed out, toss it up lightly, and add pepper, salt, sage (if liked), one half cupful of melted butter and a well-beaten egg. Work all the ingredients together thoroughly, and add to the fowl.

The addition of one pound of well-washed seedless raisins makes a nice change. A bunch of celery that has been washed clean and cut fine is also a good addition. One teacupful of good country sausage mixed into the dressing for a turkey is liked by some. Others prefer a small onion minced fine, or a teacupful of finely cut cabbage. Any one of these makes a nice addition to an ordinary plain dressing.

BREAD PUDDING.—This is delicious if properly made. Take one pint of bread-crumbs, excluding all crusts, one quart of milk, the yolks of four eggs, one tablespoonful of corn-starch, one cupful of sugar and the grated rind of one lemon. Beat the eggs and sugar to a cream; add the corn-starch, dissolved in some of the milk, then the remainder of the milk, and last the bread-crumbs and lemon-rind. Bake in a moderate oven about forty-five minutes, and spread a layer of tart jelly over the top. Beat the whites of the eggs to a stiff meringue with two tablespoonfuls of granulated sugar, add a little of the lemon-juice, and spread over the jelly, then place in a quick oven until nicely browned. This is very good with an orange used instead of the lemon; or vanilla flavoring and the jelly make a nice substitute.

BIRDIE B. BATES.

Made-Over Dishes

Often there will be left on the platter a bit of meat that doesn't seem large enough for anything, yet seems too good to throw away. After one has learned the knack of cooking, and understands how to flavor things, the possibilities of these small left-overs are almost limitless.

Now, suppose you had boiled mutton for dinner, and there was quite a bit left. Of course, some of it could be sliced very thin, and served for tea, garnishing it with parsley or celery leaves. For breakfast or supper the next day try minced mutton on toast. Remove all the fat and gristle from the mutton, and chop it fine. To one cupful of the meat add one salt-spoonful of salt, a very little pepper, and one half cupful of the thickened gravy, which was also left. Heat quickly in a saucepan, and pour over slices of hot buttered toast. A mince of this sort is very delicious made of cold veal, lamb, turkey or chicken, or any of the white meats. Beef is not so good done in this way.

Another way to use up mutton is in a "pie." Prepare the meat by removing all fat and gristle, and chopping fine. Boil and mash some potatoes if you do not already have some left from the meal. To every cupful of the meat add one salt-spoonful of salt, a bit of pepper, one teaspoonful of chopped onion and one half cupful of gravy. Put the seasoned meat and gravy in a deep baking-dish, mixing the gravy with it, cover it with the mashed potato, and bake in the oven until a beautiful golden brown. This is good enough and sightly enough to grace the dinner-table again.

Next try scalloped mutton. Cut the cold mutton into small, thin pieces, rejecting all fat and gristle. Put a layer of bread-crumbs in the bottom of a shallow baking-dish, then a layer of meat, a very thin layer of crumbs, then gravy. Alternate these layers until the dish is full. Spread buttered crumbs on the top, and bake until the crumbs are brown.

Now that you have ways in which to finish up your mutton, let us try what we shall do with the beef which is left. You can make a beef pie with a potato crust, the same as for mutton.

Another nice way to make over the beef left from dinner is to slice the meat very thin in neat, careful slices, having them as nice as you can possibly cut out of the scraps. Put one tablespoonful of butter or clear beef-dripping into a saucepan. When this is hot, brown one tablespoonful of chopped onion in it, taking care that it does not burn. Skim out the onion, and brown the slices of meat in the flavored butter. If you use dripping instead of butter, sprinkle the slices of meat with salt before browning them. Remove the meat from the saucepan to a hot platter, and pour into the saucepan the gravy left from the roast; dilute with a little boiling water, let it come just to a boil, season to taste with salt and two tablespoonfuls of Worcestershire sauce, or if that makes too hot a flavor, one half cupful of stewed and strained tomato, and pour this gravy over the meat in the platter. If you wish to make this dish look especially attractive and tempting, put a border of mashed potato about the edge of the platter, and set in the oven a few minutes to brown.

In the serving of any made-over dish, half the battle is in garnishing daintily. There are so many things with which to garnish that one can make many changes. For salads of which cold meat may form a portion, there are no prettier garnishes than beet pickles cut thin and in fancy slices, such as hearts, diamonds, stars, etc. Parsley cut into tiny shreds and sprinkled over the salad is refreshing to look at. The white or the yolk of egg run separately through a potato-ricer, and sprinkled over a salad, makes a very delicate garnish. The salad should first be spread with dressing, then anything will stick in place.

GENEVA MARCH.

Old-Time Advisers

Mr. Peachem in the "Compleat Gentleman," written early in the seventeenth century, addressing himself to the young students, says: "With the gown you have put on the man. Your first care should be the choice of company. Men of the soundest reputation for Religion, Life and Learning, that their conversation may be to you a living and a moving library. For recreation seek those of your own rank and quality." In "Home Life Under the Stuarts" further quotations from the work are given.

To keep good company he enjoins as of the first importance. Frugality and a moderate diet are to be recommended. "Affabilitie in Discourse" has a paragraph to itself: "Giving entertainment in a sweet and liberal manner, and with a cheerful courtesie seasoning your talk at the table among grave and serious discourses with conceipts of wit and pleasant inventions, as ingenious Epigrames, Merry Tales, witty Questions and Answers, etc." It must be admitted, however, that the specimens of wit which he gives do not seem to modern taste in the least funny.

From the letters of Lady Brilliana Harley to her son at Oxford we get a glimpse of the home side, of the anxieties of a very careful and tender mother, her advice as to health and religion, and her provision for his comfort. She writes:

"Deare Ned, if you would have anythinge send me word; or if I thought a cold pye, or such a thinge, would be of any pleasure to you, I would send it you. But your father says you care not for it, and Mrs. Pirson tells me, when her sonne was at Oxford, and shee sent him such thinges, he prayed her that she would not."

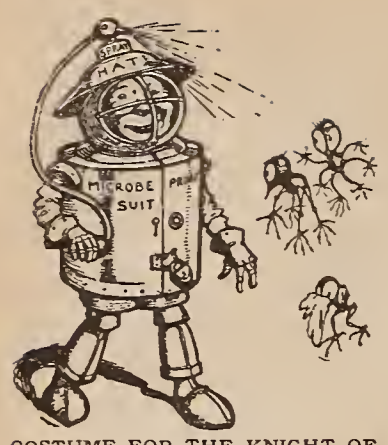
Her son seems to have set her mind at ease on the subject, for the next year she writes:

"I haue made a pye to send you; it is a kide pye. I believe you haue not that meat ordinarily at Oxford; on halfe of the pye is seasned with on kind of seasning, and the other with another. I thinke to send it by this carrier."

Again she writes: "I like the stufe for your cloths well; but the cullor of those for euery day I doo not like so well; but the silk chamlet I like very well. Let your stokens be allways of the same culler of your cloths."—Youth's Companion.

A "Fairy" Egg

A trained nurse cooked a "fairy" egg for her patient in this way: Beat the white to a stiff froth, butter a moderately hot frying-pan, and put the white in, making a depression in the top, into which drop the unbroken yolk. Cover, and cook for three minutes. Before eating, the yolk was stirred through the white with a fork, and seasoning was added. The crust that forms underneath should not be eaten by an invalid with a weak digestion.—Bettie.



COSTUME FOR THE KNIGHT OF THE TWENTIETH CENTURY

Dissertation on the Terrible Danger of Being Alive

By Louis Joseph Vance

Illustrations by Robert A. Graef

He could hear his microbes gnaw.—Mark Twain

SANITARY MEASURES APPLIED TO LITERATURE

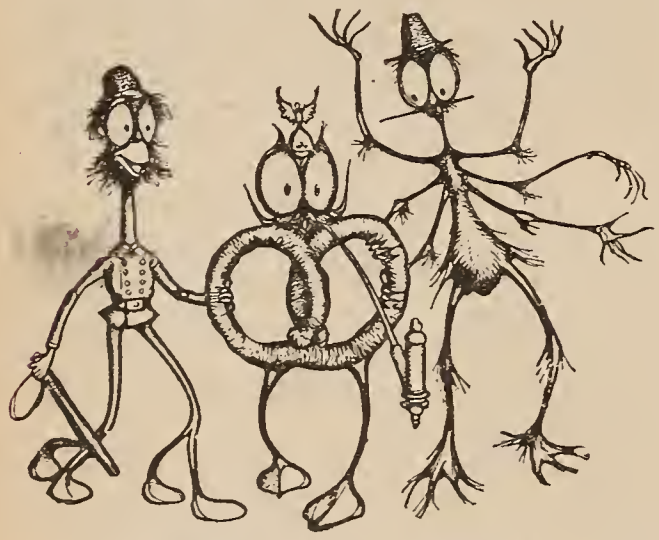
THERE was once a time, and it was not so very long ago, either, when the average man hugged the delusion that he actually had a fighting chance in this struggle for existence. If he was ordinarily sanitary, and had common sense and exposed plumbing and individual towels and things, and if he avoided eating decayed foods, and got vaccinated once in a while, he was apt to believe that he was practically germ-proof. Of course, this sounds absurd to us. We live in an enlightened and germful age, and we know that the average man of a few years ago was a poor, benighted being who shamefully neglected his microbes. Nevertheless one is inclined to envy him a bit, his ignorance was so blissful.

And indeed he was not on speaking terms even with one half of the microcosms with which we of today are so familiar. He was accustomed to kiss his wife and offspring and to shake his neighbor's hand without the least fear of encountering a fresh species of bacilli.

Man once enjoyed himself and life generally; but science and the germ theory came and changed all that —took all the pleasure out of existence, and fairly darkened the sunshine with billions of bacteria. At first man struggled feebly; as the comic papers of the past will testify, he even joked about His Majesty the Microbe. But that stage soon passed; germs began to get too thick for elbow-room, the situation became serious, and man tried argument.

He remembered how, merely because a paternal government took pains to thoroughly disinfect the immigrants from Europe, he cherished somewhere in his subconsciousness the fallacy that all germs came from Germany, all parasites from Paris, all microbes from Ireland. But never mind, the average man soon discovered his mistake.

Now a fresh danger threatens us. Not content with discovering and cataloguing new and numerous microbes to make life interesting for us, and with labeling them with strange and terrifying names, our scientists have at last evolved a mental disease caused



THE IRISH MICROBE, THE GERMAN GERM AND THE PARISIAN PARASITE

by the aforesaid microbes; they call it microphobia. We submit that this is going too far. Life is sufficiently precarious as it is, goodness knows, what with microbes and microcosms, germs and parasites, bacilli and bacteria various and general, without being further saddened by the fear of microphobia. A protest should be entered, a vote of censure should be passed, against the pernicious activity of the germ-discoverers.

Time was within the memory of the living when, had you walked up to a man in an ordinarily good state of health and preservation, and told him he was a veritable walking menagerie of microbes, he would have laughed at you, and held you up to the scorn of his applauding fellows, or else have knocked you down and jumped on you for insulting him. And in the latter case the coroner's jury would have acquitted him, too. In the good old days fool-killing was not manslaughter. Now he will meekly accept the statement for an axiom, as he knows it is too, too true; for science says so, and science has the unpleasant habit of delivering the goods when called upon for proof.

Man, so science claims, is infested with germs from the time he is four hours old. We admit that we cannot explain why science allows us this four hours of germless grace; it is but another of the mysteries which science deigns not to elucidate. Be that as it may, the normal adult has the abnormal number of seventy distinct species of microbes in his midst. The total population would probably be appalling if we knew it, but science merely announces that there are but seventy species, distributed as follows: Forty-five to the larger intestine, quite some few to the smaller, thirty to the stomach and thirty to the mouth!

That settles it. We can see our finish. Hitherto we have been scoffers at the assertion that kissing is dangerous? Now who can deny it? And without kissing, what will become of courtship? It behooves science to supply us with the sanitary kiss, for without courtship marriage itself will become obsolete, or indulged in only by the ignorant. Without marriage the human race will disappear from the face of the earth, and sans man, what will the poor microbes do? Pine away and perish for want of nourishment!

For our part we incline to the belief that we are paying too much attention to these germs of ours. We have subjected to a careful analysis such of our personal fauna and flora (science always delicately re-

IT TAKES A REAL HEROINE TO BEAT HER OWN CARPETS

fers to our microbes and bacteria as "fauna and flora," in a futile attempt to rob the bacillus of its bite) as were willing to be interviewed, and we have arrived at the conclusion that their chief characteristics are self-consciousness and conceit. The more attention you pay to a germ, the more you flatter him; his bump of self-esteem swells up like a stone-bruise. Soon there will be no living with him, for he will fatten on your sufferance and thrive on your subsequent suffering. If you ignore him, he will probably leave you alone; but if you hunt him up, and tell him how bad he is, and how much you stand in awe of him, he will grow as insufferable as a matinée hero. Then it is that he gets in his finest work. Praise his industry, and immediately he tries to break the record; his best previous performance having been the reproduction of two millions of his family in one hour, he will try his hardest to create three millions.

Undoubtedly, science is largely to be blamed for this state of affairs. Given a shy, shrinking, modest little microbe, science pounces upon it and calls it something like diplococcus. Small wonder that the germ's head is turned; the first feeling of personal outrage is succeeded by one of enormous self-importance. Now, no one ever heard of a bacillus called Jones or Bill Smith, but it is respectfully suggested that science make the experiment, and call the next microcosm say Hiram, and then watch and see if it does not lie down and die from pure mortification.

The scientists, we assume, have acted in this wise with the single object of scaring man into a proper appreciation of his danger, that he may understand and provide against it. They reason, and with rea-

THE LOVE MICROBE

son: "If we tell a man that he is entertaining unawares a few Flynn microbes, he will say, 'Oh, that's all right; Flynn is a good old name. They won't do me any harm if I let 'em alone.' But if we tell him that he is possessed of a group of microbes called Leptothrix, or Mycomostoc, Sarcina, Spirochæte, Streptococcus, or even plain Bacterium termo, he will turn pale at once, and without a murmur take any nauseating dose we may think fit to prescribe." And there's something in that.

We concede that our advance in bacterial knowledge in the past few decades has been immense. From the progressive standpoint it must be mighty gratifying; also from the scientists' and the microbes'. But it has destroyed, and is still destroying, our peaceful mental poise. Men no longer take a vivid interest in the political questions of the day. If Constant Reader writes his daily letter to the papers, it is not on plutocrats he holds forth to his own satisfaction—it's parasites. The burning queries that we hear are no longer "Is Marriage a Failure?" or "Is Suicide a Sin?" but rather "Is Life Worth Living?" or "What Shall We Do to Be Saved?" Under the stimulus of scientific investigation the microbes have become so numerous and efficient that we are crowded. One can hardly turn a corner without running smack into a new specimen of bacteria.

Meanwhile the men of microbes are gleefully undismayed. For instance, one of the latest bits of pleasing information they have vouchsafed unto us is that every teaspoonful of good, rich milk is the abiding-place of four millions of happy, wriggling germs. This is of importance as defining the attitude of science on the liquor and health-food questions. The cudgels have plainly been taken up against temperance and the breakfast-cereal. The person who can take his morning dose of oatmeal complacently and with the proud consciousness that he is therewith benevolently assimilating some thirty-two millions of bacteria commands our admiration. At the same time, though we have long been aware that water teemed with bacilli of many kinds, we have taken comfort in the thought that in milk we had a beverage that was healthful, and food and drink at the same time. But four millions to the single spoonful!

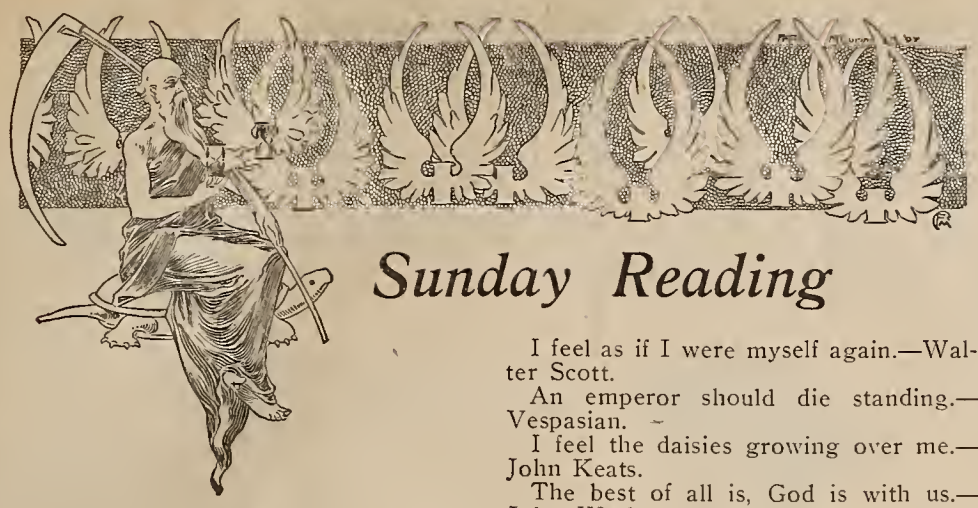
Indeed, we had trusted that there were not near so many germs in all the universe as are alleged to be in

KISSING IS MORE SCIENTIFIC THAN EMOTIONAL

one little teaspoonful of milk. This leads to speculation as to the microbe industry. Last year the cows of the United States wilfully and deliberately and with malice aforethought did freely yield two billions and ninety millions of gallons of milk. We do not know, nor do we want to know, how many teaspoonfuls a gallon contains; but allowing to each gallon a minimum of eight million microbes (and that is a plenty), we find that there are some sixteen quadrillion seven hundred and twenty trillion bacteria turned loose in one year's milk-supply. That would seem to be right smart of bacteria for a lone seventy millions of people to cope with, especially in view of the fact that an all-wise and beneficent Nature has already provided each individual with seventy species all his own.

Science, however, on some occasions overreaches the statements as to microbe-manufacture, and then hedges. Recently we have been informed that all microbes are not bad for us. Some there are who really work for our benefit. That is all very well, but we have other and more pleasing things to do during our spare time than to sit around and indulge in painful speculation as to the success of the police of our interior, the little white blood-corpuscles, in contending with the Streptococusses and the other "cusses" that are prone to infect us if we don't disinfect ourselves.

The friends of the microbe, however, do claim that there is many a beneficent bacteria, lacking whose activity we would be deprived of luxuries and necessities without number. One of these, it is asserted, is the germ that makes the wheat grow: the more of them that happen to be in a field, the more wheat will be harvested. It is even predicted that the farmer of the future will not have to trouble to fertilize his fields in the old way. He will simply go forth in the fall, armed with a bottle and a microscope, catch his germs, and bottle them. Then in spring he will just scatter microbes, and not worry about sunshine or rain.



Sunday Reading

Build Again

BY E. M. E.

If your castle fall,
What shall you do?
Why, build another,
Or it anew.
Pause not for worry,
Nor for regret;
Transform the ruins,
Victory get.

Build with new courage,
Ignore defeat,
Cherish your hope, though
Loss seem complete.
Never yet builder
Wrought thus in vain;
If your castle fall,
Just build again.

Being Still

SOMETIMES in my quiet hours I wonder why it is that we women worry so much over what we cannot help. Surely there is no one who has not learned through experience that the "blue" seasons—the times when there is no light to be seen—are but temporary, and that difficulties nearly always vanish as one approaches them. If we could but be still, and wait for these trying times of foreboding and anxiety to pass, since our fretting does no good at all! I think it good for us to think deeply and coolly over the troubles, if this can be accomplished; but where the worry element creeps in, harm is always done. We cannot be as pleasant in our homes, and it may be that a cheerful spirit and a sunshiny face in the wife may be a world of help to the family provider, who is also perplexed and troubled. Or if it is over illness, or the waywardness of some member of the home circle, surely there is nothing to be gained by wearing a mantle of gloom.

These times of depression all have their own mission in the shaping of our lives, and the preparation of our souls for the future, and a little thing has made me think that perhaps we mar their work greatly by our futile resistance. My little boy was sitting on the floor trying to write his name with unsteady baby fingers. He had only a vague idea of how the letters ought to be formed, and brought his paper and pencil to me, and asked me to help him. I took the chubby hand in mine, and tried to guide it slowly over the paper, but his efforts to help me made the letters all crooked and ugly. "Now, just let your hand rest quietly in mine, Albert," I said; and as he obeyed, I wrote his name clearly and in symmetrical letters. He sat down again to his task, but my own words kept ringing in my ears, "Just let your hand rest quietly in mine."

So often it comes to me now, when I am trying to "see and choose my path," just to let my hand rest quietly in my Master's, and when I do it he never fails to perfect my own poor work. Not often do I see the fruit of my efforts, as Albert saw the smoothly written name, but such a sense of rest and trust comes that I know all is well.

SUSIE BOUCHELLE WIGHT.

At the Last

The following "Last Utterances of Famous Men and Women," as prepared by the Baltimore "Methodist," should be of interest to all:

It is well.—Washington.
I must sleep now.—Byron.
Is this your fidelity?—Nero.
Then I am safe.—Cromwell.
Let the light enter.— Gœthe.
God's will be done.—Bishop Ken.
Lord, take my spirit.—Edward VI.
Lord, receive my spirit.—Cranmer.
Don't give up the ship.—Lawrence.
It is the last of earth.—J. Q. Adams.
Don't let poor Nellie starve.—Charles II.
Give Dayrolles a chair.—Archbishop Sharp.
I thank God I have done my duty.—Nelson.
It matters little how the head lieth.—Raleigh.
A dying man can do nothing easy.—Franklin.
I feel as if I were myself again.—Walter Scott.
An emperor should die standing.—Vespasian.
I feel the daisies growing over me.—John Keats.
The best of all is, God is with us.—John Wesley.
Many things are becoming clearer to me.—Schiller.
Here, veteran, if you think it right, strike.—Cicero.
Let me die to the sounds of delicious music.—Mirabeau.
Don't let that awkward squad fire over my grave.—Burns.
Taking a leap in the dark. Oh, mystery!—Thomas Paine.
I thought that dying had been more difficult.—Louis XIV.
It is small, very small [alluding to her neck].—Anne Boleyn.
I do not sleep. I wish to meet death awake.—Maria Theresa.
Let me hear those notes so long my solace and delight.—Mozart.
We are as near heaven by sea as by land.—Sir Humphrey Gilbert.
Remorse! Remorse! Write it! Write it! Larger! Larger!—John Randolph.
O liberty, liberty, how many crimes are committed in thy name.—Madame Roland.
I am dying out of charity to the undertaker, who wishes to earn a lively Hood.—Hood.
Throw up the window, that I may once more see the magnificent scene of Nature.—Rousseau.
Let us cross over the river, and rest under the shade of the trees.—Stonewall Jackson.
Crito, we owe a cock to Æsculapius; pay it soon, I pray you, and neglect it not.—Socrates.
My soul I resign to God, my body to the earth, and my worldly possessions to my relatives.—Michael Angelo.
I pray you see me safe up, and for my coming down let me shift for myself.—Sir Thomas More on the scaffold.
I have provided for everything in my life except death, and now, alas! I am to die, though thoroughly unprepared.—Cæsar Borgia.

Right Side Out

Jack was cross; nothing pleased him. His mother gave him the choicest morsels for his breakfast and the nicest toys, but he did nothing but complain.

At last his mother said, "Jack, I want you to go right up to your room and put on all your clothes wrong side out."

Jack stared. He thought his mother must be out of her wits.

"I mean it, Jack," she repeated.

Jack had to obey; he had to turn his stockings wrong side out, and put on his coat and trousers and his collar wrong side out.

When his mother came up to him, there he stood—a forlorn, funny-looking boy, all linings and seams and ravelings—before the glass, wondering what his mother meant; but he was not quite clear in his conscience.

"That is what you have been doing all day—making the worst of everything. You have been turning everything wrong side out. Do you really like your things this way so much, Jack?"

"No, mama," answered Jack, shamefacedly. "Can't I turn them right?"

"Yes, you may, if you will try to speak what is pleasant and do what is pleasant. You must do with your temper and manners as you prefer to do with your clothes—wear them right side out. Do not be so foolish any more, little man, as to persist in turning things wrong side out."—Baltimore and Richmond Christian Advocate.

Gems of Thought

The need of to-day is applied Christianity.

O Lord God, thou art our refuge and our hope. On thee alone we rest; for we find all to be weak and insufficient but thee. Many friends cannot profit, nor strong helpers assist, nor prudent counselors advise, nor the books of the learned afford comfort, nor any precious substance deliver, nor any place give shelter, unless thou thyself doth assist, strengthen, console, instruct and guard us. To thee, therefore, we lift up our eyes; in thee, our God, the Father of mercies, do we put our trust. Bless and sanctify our souls, that they may become the holy habitation and the seat of thine eternal glory. Amen.—Martineau's Service Book.

NATURE'S GREATEST CURE FOR MEN AND WOMEN

Swamp-Root is the Most Perfect Healer and Natural Aid to the Kidneys, Liver and Bladder Ever Discovered

"SWAMP-ROOT SAVED MY LIFE"

A Farmer's Strong Testimonial

I received promptly the sample bottle of your great kidney remedy, Swamp-Root.

I had an awful pain in my back, over the kidneys,

MR. T. S. APKER.

and had to urinate from four to seven times a night, often with smarting and burning. Brick-dust would settle in the urine. I lost twenty pounds in two weeks, and thought I would soon die. I took the first dose of your Swamp-Root in the evening at bedtime, and was very much surprised; I had to urinate but once that night, and the second night I did not get up until morning. I have used three bottles of Swamp-Root, and to-day am as well as ever.

I am a farmer, and am working every day, and weigh 190 pounds, the same that I weighed before I was taken sick.

Gratefully yours,

Sec. F. A. & I. U. 504. April 9th, 1903. T. S. APKER, Marsh Hill, Pa.

There comes a time to both men and women when sickness and poor health bring anxiety and trouble hard to bear; disappointment seems to follow every effort of physicians in our behalf, and remedies we try have little or no effect. In many such cases serious mistakes are made in doctoring, and not knowing what the disease is or what makes us sick. Kind Nature warns us by certain symptoms, which are unmistakable evidence of danger, such as too frequent desire to urinate, scanty supply, scalding irritation, pain or dull ache in the back—they tell us in silence that our kidneys need doctoring. If neglected now, the disease advances until the face looks pale or sallow, puffy or dark circles under the eyes, feet swell, and sometimes the heart acts badly.

There is comfort in knowing that Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, fulfils every wish in quickly relieving such troubles. It corrects inability to hold urine and scalding pain in passing it, and overcomes that unpleasant necessity of being compelled to get up many times during the night to urinate.

In taking this wonderful new discovery, Swamp-Root, you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered.

SWAMP-ROOT A BLESSING TO WOMEN

My kidneys and bladder gave me great trouble for over two months, and I suffered untold misery. I

MRS. E. AUSTIN.

became weak, emaciated and very much run down. I had great difficulty in retaining my urine, and was obliged to pass water very often night and day. After I had used a sample bottle of Dr. Kilmer's Swamp-Root, sent me on my request, I experienced relief, and I immediately bought of my druggist two large bottles, and continued taking it regularly. I am pleased to say that Swamp-Root cured me entirely. I can now stand on my feet all day without any bad symptoms whatever. Swamp-Root has proved a blessing to me. Gratefully yours,

MRS. E. AUSTIN,
19 Nassau St., Brooklyn, N. Y.

To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy Will do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail

SPECIAL NOTE—If you are sick or "feel badly," send at once to Dr. Kilmer & Co., Binghamton, N. Y., who will gladly send you by mail immediately, without cost to you, a sample bottle of Swamp-Root, and a book telling all about it and containing many of the thousands upon thousands of testimonial letters received from men and women cured. In writing to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say that you read this generous offer in the FARM AND FIRESIDE.

Swamp-Root is pleasant to take. You can purchase the regular fifty-cent and one-dollar size bottles at the drug-stores everywhere. **Don't make any mistake, but remember the name, Swamp-Root, Dr. Kilmer's Swamp-Root, and the address, Binghamton, N. Y., on every bottle.**

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Does all kinds of light and heavy stitching. Does all kinds of light and heavy riveting.

WILL SAVE THE PRICE OF ITSELF MANY TIMES A YEAR. To show it means a sale. AGENTS MAKE FROM $3 to $15 A DAY. One agent made $20 the first day, and writes us to hurry more machines to him. Write for terms to agents.

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SHIRT-WAIST SETS! Dainty! Stylish! The latest convenience for cotton, woolen and silk shirt-waists; readily adjustable to all. Why make buttonholes? Pearl or Mourning. *25-40-50 cents a set, post-paid.* LADIES' LATEST NOVELTY CO., 3 Station J, New York City

GASOLINE WASHING COMPOUND 8 lbs. for 20c. Makes washing easy. Cleans everything. Send 10c. for receipt. SILVER LAUNDRY CO. Box 517, - - Toledo, Ohio

How to Dress

The "Awkward Age"

THE most important dress problem for mothers to solve is how to fittingly gown their daughters during what is usually termed the "awkward age." The wise mother knows that dress can, and should, compensate for the defects of immaturity. It should, however, do more. It should inculcate a graceful carriage and personal style which will be permanent and characteristic. On this page will be found not only the latest fashions for girls from twelve to eighteen, but styles which have been carefully selected to hide the defects and bring out the good points of a young girl's figure.

Le Roy Coat

This smart-looking box-coat is good style for a girl from twelve to sixteen. It is made with a cape trimmed with a stitched cloth strap over each shoulder. The mannish little turn-over collar and the cuffs are of velvet, while rows of stitching are used as the trimming. Made of tan-colored fine melton cloth, with dark brown velvet collar and cuffs, this coat would be a decidedly smart-looking little garment and could be used for a best coat with good reason. For

LE ROY COAT

every-day wear it might be made of dark blue rough tweed, with the velvet the same shade, but the lining should be of some pretty, gay-looking Tartan plaid silk. The pattern for the Le Roy Coat, No. 201, is cut in 12, 14 and 16 year sizes.

Carola Waist

This dainty model clearly illustrates how important a part trimming plays in transforming a waist. The Carola Waist is really cut in simple shirt-waist fashion. The box-plait down the front has a charming touch of novelty given it by its row of little black velvet bows. The stock collar, shoulder-cape and deep cuffs are of Arabian lace. The waist has a plain back, with a few gathers at the waist-line. Crêpe Mignon is an attractive material for a waist of this sort, or any of the new soft-silks. The pattern for the Carola Waist, No. 209, is cut in sizes 34, 36 and 38.

CAROLA WAIST

CAREY COAT

Carey Coat

The small girl, like her grown-up sister, wears a long coat this year. A graceful little model is the plaited coat cut a trifle low in the neck and made with one of the new draped capes which fall in a point over the shoulders. In dark red faced cloth this coat would be extremely stylish with the bands which outline the neck and fall in two stole-ends down the front, the cuffs and the trimming on the cape in a black fancy braid, with the design wrought in gold threads. This coat could also be made in dark blue serge, with Breton embroidery bands used for the trimming. The pattern for the Carey Coat, No. 151, is cut in 8, 10 and 12 year old sizes.

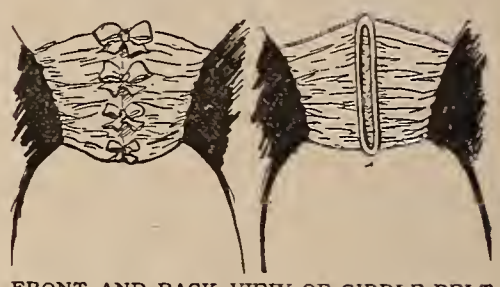
ROSALIND BLOUSE AND ARDEN SKIRT

Rosalind Blouse and Arden Skirt

Among her school-dresses every girl likes to have at least one frock a little better than the rest, as there are so many times when she is invited to spend the afternoon with some friends and does not have time to go home and dress. This little gown is one of the best of the well-dressed girl's school-frocks. It is made with a pretty, graceful blouse, and a skirt with inverted plaits at the bottom to give it a stylish flare. The blouse has a double shoulder-cape, and the sleeves are finished with double cuffs on the gauntlet order. Plaid silk is used for the trimming, which is applied in vertical bands, and also outlines the shoulder-cape and cuffs. The blouse buttons in the back, and the skirt is a seven-gored model. This dress would be extremely pretty in dark red canvas cloth with plaid silk bands, or it might be made of dark blue cheviot with one of the new plaid braids in green and dark blue for the trimming. The patterns for the Rosalind Blouse, No. 155, and the Arden Skirt, No. 156, are cut in 8, 10 and 12 year old sizes.

Girdle Belt

This girdle belt is very fashionable, and will be worn considerably for the coming season. It is a crushed belt, made on a fitted lining. A very long buckle ornaments the back, and it closes in the front under a ladder of bows, the lower one being quite small, and the others gradually increasing in size toward the top. The pattern for the Girdle Belt, No. 200, is cut in sizes 22, 24 and 26.



FRONT AND BACK VIEW OF GIRDLE BELT

Boys' Overcoat

This stylish box-coat, suitable for boys of the school age, is made from any heavy men's cloth or suitings, has a box-plait down the back, and a fly front. It can be made with either a velvet collar or one made from the same material as the body of the coat. The lining is made either of serge or any light cloth lining. The pattern for the Boys' Overcoat, No. 2037, is cut in 4, 6, 8, 10 and 12 year old sizes.

Seen in New York Shops

Fancy metal buttons in gold, silver, gun-metal and bronze.

Bronze satin shoes adorned with fancy beading in self-color.

Large felt hats for children, in red, blue, brown, white and black.

Real torchon lace used for the trimming of handsome evening wraps and costumes.

Embroidered linen doilies, the embroidery work being done in two shades of the same color.

Women's stiff collars, handsomely embroidered in heavy silk, running chiefly to floral designs.

Children's white dresses, with the portion below the waist-line a handsome embroidered flounce.

Novelty trimming, consisting of bands of black velvet, applied with straight galloons and lace.

Boys' school-suits in a number of Scotch-wool effects, unfinished worsteds and fancy mixtures in variety almost without end.

BOYS' OVERCOAT

Walking-toques of chenille in two and three color combinations, running principally in dark effects.

Small felt hats in dark tones, trimmed with bands of light-colored zibeline ribbon, edged with gilt braid.

Tea-gowns of accordion-plaited cream voile, relieved with long bands of embroidery inserted in the gowns.—Modes.

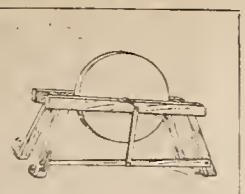
PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention number and size of pattern desired. Our Fall and Winter Catalogue sent to any address free.

Prize Puzzles

We Want to be Neighborly, and so Invite All of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment

Residents of Springfield, Ohio, are not allowed to enter the contests.



THE FLOWER CONUNDRUMS

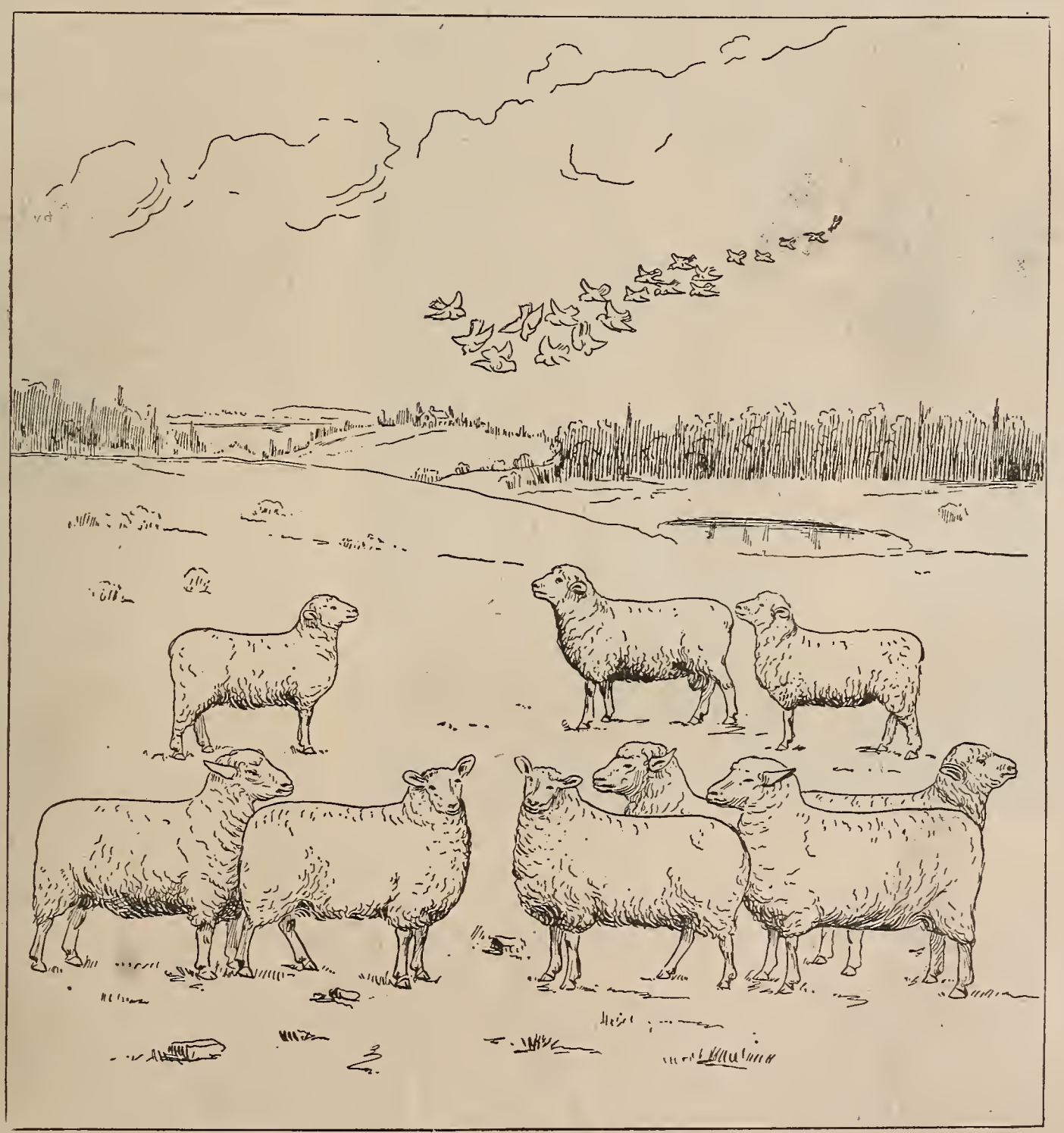
Here Are Six Conundrums, the Answer to Each Being the Name of a Flower. The First is Represented by the Large Picture on this Page. The Others You Are to Answer Without the Aid of Pictures

1—What Sort of Flower Does the Picture Suggest?
2—The Name of What Flower Would the Sun Suggest?
3—What Flower is Most Appropriate for a Lover to Give to "The Girl He Leaves Behind Him?"
4—What Flower's Name is Suggested by a Picture, or Symbol, Used Very Frequently in the Roman Catholic Church?
5—What Enormously Rich Family Bears the Same Name as a Simple Roadside Flower?
6—The Name of What Flower Does a Baby Learn First?

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before January 15th.

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a copy of the ever-popular book, "Robinson Crusoe," will be given for the first correct list of answers received from each state and territory. This means a book for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever they may be located. In the states where the cash prizes are awarded the prize book will be given to the person sending the second correct list, so that no one person will receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.



ANSWERS TO PUZZLES IN THE DECEMBER 1st ISSUE

The Barn-Articles Puzzle

1—Sulky-Plow. 4—Harness.
2—Corn. 5—Fodder.
3—Buckboard. 6—Grain.

The cash prizes are awarded as follows:

Girl's cash prize, two dollars—Agness D. Thompson, Kensal, North Dakota.

Boy's cash prize, two dollars—Lewis Dickerman, Elgin, Minnesota.

Woman's cash prize, two dollars—Mrs. H. M. Frost, Tiverton, Rhode Island.

Man's cash prize, two dollars—K. Rittenhouse, Stateroad, Delaware.

As a consolation prize, a beautiful picture, entitled "Pharaoh's Horses," is awarded to the following persons for sending the first correct list of answers from their respective states:

Alabama—Mrs. M. A. Hicks, Roberts.
Colorado—J. M. Sackett, Boulder.
Delaware—Louise Hance, Stateroad.
Illinois—Ellen Copes Abbott, Pekin.
Indiana—Hazel Hofman, Eaton.
Iowa—Inez G. Myers, Lenox.
Missouri—W. Harris Willows, Kirksville.
Ohio—Anna Johnson, Columbus.
Oklahoma—Nina Holmes, Roosevelt.
Oregon—L. L. Woodward, Forestgrove.
South Dakota—D. W. C. Towne, Fairfax.
Washington—Mrs. Bertha Morrill, Alki.
West Virginia—Clara Diehl, Mason.

Customer—"I want a ton of coal."
Dealer—"Yes, sir. What size?"
Customer—"Well, I'd like to have a two-thousand-pound ton."—Chicago Daily News.

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Comrades of Travel

By FRANK H. SWEET

CHAPTER XI.

A LOSS OF TEMPER

When Page and Dorothy returned to the hotel, they found Mrs. Spencer-Browne engaged in conversation with the capitalist. Apparently both were pleased, for the capitalist was smiling and rubbing his hands as he talked, while Mrs. Spencer-Browne was listening and bowing. They waited nearly a quarter of an hour before the conversation came to an effusive ending and Mrs. Spencer-Browne joined them.

"Mr. Burley is so nice," she said to Dorothy, as she arranged herself in the carriage; "so different from most business men, who seem to think their time too valuable to be wasted on mere acquaintances. And he explained things in such an easy, comprehensive way. I know all about the business now—how it is managed, dividends declared, preferred and common stock, and all that. It's beautiful. And the way some people talk about men who get up corporations and things; why, it's positively shameful! They're the real benefactors of the country. Mr. Burley has been kind enough to explain the matter in its true light. And he's been so disinterested in letting me come in with the first stockholders," with a long-drawn sigh of satisfaction. "Yes," in answer to the sudden consternation on Dorothy's face, "it's all settled. I've made a deal—I believe that's the term."

"Oh, aunt!" ejaculated Dorothy.

"I'm sorry," Page added, briefly.

Mrs. Spencer-Browne looked at him inquiringly. She had not appeared to see him before. "Are you?" she said, indifferently. "Really, it does not matter. I suppose it's because you do not like Mr. Burley. I didn't quite understand the situation before, but when I spoke about your disapproval of investing with him, he was kind enough to set me right. You are not very good friends."

"Not very," Page acknowledged, with a grim smile.

"Well, you have lost money, and he has gained, and I suppose that sort of feeling is natural to some natures; but business advice under such circumstances isn't apt to be of much value. Yes, Dorothy, I've made a deal, and I'm glad to say it's quite extensive. Mr. Burley has generously agreed to let me have the entire block of preferred stock that comes to him some way through his being president of the road. He says it will be the very gilt-edged of preferred, and that he wouldn't part with it to another business man under any consideration. But when a client is a lady, he says, even a business man has to forget self-interest, and be chivalrous. I think it's very nice of him. Mr. Loud has everything all ready, and the papers will be transferred this evening."

"But how will you pay for so much, aunt?" faltered Dorothy. "You haven't enough money here."

"Of course not, child. Why, it will take all I can raise. You don't realize what an extensive purchase I am making. But it's sure to double my investment inside of a year. Mr. Burley says there isn't any doubt of that. And he's very nice about the payment. I'm to let him have my bonds and Boston water stock, and make him attorney. He can take them in exchange for his stock, or sell them—he will know best about that, of course. And he says I can have his block of preferred at par, although it's sure to mount up to a high premium soon." She turned suddenly to Page. "I don't suppose that you approve of Mr. Burley's kindness to me, Mr. Withrow," she said, sarcastically.

"No," answered Page, bluntly; "nor, if you will excuse me, of your credulity, Mrs. Spencer-Browne."

The visit to Fort Marion did not prove very interesting. Mrs. Spencer-Browne was in a hurry to return, and she confined her talk almost entirely to the stock she had just purchased; and even from this she excluded Page as much as possible. Occasionally he tried to address a remark to Dorothy, but Mrs. Spencer-Browne invariably caught it up carelessly, and then went back to her purchase. And inside the fort even the usually imperturbable Sergeant Brown, the officer in charge, grew discouraged while showing them around, and finally lapsed into silence. No matter how much of a routine this guiding had grown, he liked to have his parties show interest, and indulge in exclamations of wonder and rapture, and perhaps of fear, when shown the dungeon; but this party failed him in every respect. Mrs. Spencer-Browne's mind was elsewhere, Dorothy was too distressed and uncomfortable to pay much attention, while Page already wished the thing over.

When they returned to the hotel, Mrs. Spencer-Browne waited for her niece to pass inside, then raised a detaining hand to Page. "One moment, Mr. Withrow," she said. "Dorothy and I will have to break our engagement with you for this evening. It will be a great disappointment, of course, but I shall want Dorothy to help me look over some papers. There are plenty who will be glad to have the seats. You might give them to Mr. Burley and Mr. Loud. And another thing, Mr. Withrow," without waiting for him to speak; "it may seem complimentary to us—to Dorothy—to be followed about like this, but we don't like it, and—excuse me—it isn't proper. When a man descends to seeking information from a servant, and then acts upon it as openly as you have done in staying over at St. Augustine, it—it—" Mrs. Spencer-Browne stopped suddenly. She was getting angry, and might say more than she would like to remember. "I think you will understand, Mr. Withrow," she went on, less vehemently, "that your affairs need more looking after just now than ours. There will be no plans nor engagements for to-morrow, nor for the day after. Our time will be fully occupied. Dorothy is in my charge down here. That is all, I think."

She was about to pass in, but Page stepped before her. His face had grown stern. "Pardon me, Mrs. Spencer-Browne," he said, "but I doubt if you quite realize what you are saying; and if you do, you certainly don't believe it. As to Miss Dorothy, while conceding you due authority, I must insist on hearing this from her own lips."

For a second only she hesitated, then her eyes dared his. "Of course," she answered, "that will be best. We will doubtless find her in the salon."

But she was not there, and they passed through to the court. Dorothy was occupying a chair in one of the secluded alcoves, gazing idly at some children playing about the fountain.

"I have just broken our engagement with Mr. Withrow for this evening, Dorothy," her aunt began, entering at once upon the subject. "I shall want you to help me with some papers."

Dorothy looked surprised, but smiled her willingness. "If you need me, of course, aunt," she said. "I am sure Mr. Withrow will excuse us."

"And there is another thing, Dorothy," Mrs. Spencer-Browne went on. "I have been telling Mr. Withrow that we don't quite like the way he sought information from our servant, and then acted upon it by staying over here at the same hotel. It is pointed enough to cause gossip among those who notice it."

"It is very beautiful," she said, without turning

Dorothy rose to her feet, her eyes flashing. "I don't believe that Mr. Withrow ever sought any information from the servant," she protested, indignantly. "It's a shame to accuse a man of such a thing without evidence. And I doubt if he even knew that we were stopping at this hotel."

"I think the evidence is very conclusive to the contrary, Dorothy. But that is not all. Mr. Withrow's affairs are in bad shape, and Mr. Burley hinted that they might soon be in worse. They need his attention at once. Is it right for us—for you—to keep him here?"

"Aunt, how dare you!" began Dorothy; then her voice broke, her eyes filled. She turned to leave.

Page took a quick step forward. "Mrs. Spencer-Browne!" he warned, but she threw up her hand imperatively. She had never heard that tone from him before, and beneath the surface it made her cower; but she had cast the die, and must carry it out with a bold front.

"You have not answered me, Dorothy," she said, coldly. "You know something about Mr. Withrow's affairs, that his intention was to go straight through, and attend to his pineapple interests, and you can form some guess as to why he is staying here. Do we wish him to remain any longer? Answer."

"No, no, no!" gasped the girl; then she turned hurriedly, and slipped away. Mrs. Spencer-Browne's arm fell to her side.

"You hear," she said, grimly. "I have never spoken like that to Dorothy before in my life, and hope I shall never have occasion to again. But something had to be done. You were not gentleman enough to go away without a scene. And," sarcastically, "I doubt if you leave now. Indeed, I do not expect you to. But I think this will prevent any more golf or driving arrangements for a few days."

Page bowed, an odd light in his eyes. "Certainly, Mrs. Spencer-Browne," he acquiesced, without the least resentment in his voice; "you are right. I would not presume to even dream of any such arrangement. But if you will pardon my alluding to so delicate a matter as a—er—loss of temper, I would suggest that this is one of the great mistakes of your life. You will realize it before another day. Good-by, and please remember that this does not change my friendly regard for you in the least."

He bowed again, and turned back into the salon, smiling. Somehow he had a feeling that during the past half-hour Mrs. Spencer-Browne had been far more of a friend to him than an enemy. And back there in the court, with no one in sight but the children playing about the fountain, and with his words yet ringing in her brain, Mrs. Spencer-Browne was already becoming conscious of the same feeling; nay, she knew that she had made a mistake, a great one, and the knowledge was exceedingly bitter.

Page passed through to the office. Most of the people there were absorbed in the evening papers. A few groups were talking in hushed voices. A great steamer had gone down in midocean, and all the passengers were lost. Some of the guests had had friends on board, or knew people who had, and they crowded about the telegraph-window for possible later news. Presently a boy crossed to a man a few feet from Page, and handed him an envelope. The man opened it, and uttered a startled exclamation. Page turned. He had not noticed the man before. It was Mr. Burley.

The promoter was only a short distance away. He hurried to the capitalist's side. "What is it, Mr. Burley?" he asked, anxiously. "Anything up?"

"Up!" wheezed the capitalist, his voice shaking; "I should say so—or down, rather. This telegram is from my business agent, and he says that Tom—my only brother, you know—and his son Wilbur were on the boat. They were the only near relatives I had. Wilbur was to be my heir." He stopped, and read the telegram through again, word by word, his hand shaking. No doubt but they're gone," he went on, slowly; "and if it is so, I don't even know the name of my next relative, who'll be my heir. But it isn't any closer than third or fourth cousin."

The through train south left at about ten in the morning. Page had an early breakfast, and got his baggage off. There were a number of things he wished to attend to, besides having an interview with Ingraham, the landman. This last he did not reach until after nine. When he left the land-office it lacked but ten minutes of train-time. He arrived at the station just in time to swing himself on the rear of the last car as it glided away. Passing through this, he found the conductor talking with the porter of the next car, which was a parlor-car.

"Any spare seats, porter?" he asked.

"No, sah. Hab to turn some folks off already, sah. Mebbe dah'll be some aftah we leab Ormond, sah."

"Oh, well, it doesn't matter."

He turned back into the car he had just passed through, and found a vacant seat on the shady side. There was no one in the car that he knew, and after gazing for some time at the uninteresting landscape outside, he suddenly found himself smiling at the involuntary wish for the company of Bill Wittles. When the train-boy came through, he purchased a paper, and lost himself in that for a time; then he turned again to the window. The landscape was still uninteresting, for the train was rushing on through dreary pine-belts and reaches of white sand; past straggling villages whose newness was yet to be familiarized with paint and fences; into the orange-belt, where uncared-for circles of sprouts, rising hopefully from blackened parental stumps, spoke more eloquently than could words of the great series of freezes; and on and on, down the shores of the Halifax River and the Indian River, and at length, late in the afternoon, into the beautiful palm groves along St. Lucie Sound, with wild geese and pelicans and strange tropical birds flying leisurely away as the train rushed by. At last from out the darkness came outposts of advancing lights, and they were at West Palm Beach. A brief stop, and then the train pulled across the long bridge over Lake Worth, past the massive, shadowy Poinciana, not yet opened, and on to the Inn, which was brilliantly lighted.

As he left the train, Page noticed that in spite of the earliness of the season a great many passengers were alighting. His eyes swept over them carelessly. Some were just stepping from the cars, and giving their hand-bags and wraps to obsequious porters, others were crossing the platform in the wake of these hurrying functionaries, a few were already mounting the broad steps of the hotel. Suddenly he started, smothering a whistle of mingled surprise and consternation. Two of the figures were familiar, and as he recognized them, Page hastily turned his face in the opposite direction. It was an act almost without conscious thought, though with a feeling that if Mrs. Spencer-Browne should see him she could no longer have a possible doubt that he was following them.

CHAPTER XII.

AT THE DELLMOORE

Page turned to a trainman who was standing near. "Is there another hotel in the vicinity?" he asked.

"Not this side of the lake," the man answered. "Our system has only two at Palm Beach, and the Royal Poinciana won't be open until about the fifteenth."

"Well, hasn't some other system or private person got one, then?" Page asked, impatiently; "a small one, maybe, or even a boarding-house? Surely a resort like this must have more than two places to accommodate travelers." He slipped something into the man's hand, adding, "Try now, and see if you cannot remember."

The man grinned. "Thank you, sir," he said. "You ain't scarce of money, I see. That being the case, you can't do better than to stop right here at the Inn. It's the best place going, by all odds. Still, if you must have another, there's several small hotels on the other side, at West Palm."

"But this side, man," encouraged Page. "Rack your brain a little more severely, and see if you cannot remember something on this side."

The man looked him over critically. "If 'twas a matter of cost," he answered at length, doubtfully, "which, I'm glad to say, I've found out it isn't, I could mention a boarding-house or two."

"That's right," commended Page, warmly; "you're getting on famously. Now try again, and see if you can recollect which of the boarding-houses is best."

"Dellmoore's the place you want, sir," he said. "It's just beyond the Poinciana. You'll find it all right. Go by the hotel, and turn down the lake-path a few rods, then ask for Dellmoore Cottage. Anybody will point it out. But remember," warningly. "I ain't advising this. My plan would be for you to stay right here at the Inn."

"Thank you, but I'll try Dellmoore. Now, can you tell me where to find the baggage-office?"

"There isn't any except at the hotels. Your things won't be easy to get over to-night, it's so late; but send the checks to the Inn baggage-porter in the morning, and he'll get them to you all right. But remember, I don't—"

Page nodded, and turned briskly down the avenue toward the Poinciana. He had decided not to go to the Inn, for a few days at least. If Dellmoore should be full, he would try somewhere else, or go across the lake to one of the hotels there. But the Cottage was not full, and he was soon shown to a comfortable front room, which afforded him a fine view of the lake.

He did not get down to breakfast the next morning until some of the guests had eaten and gone, but a few still lingered at the table. One of these, a slight, frail-looking woman, glanced up at his entrance with pleased recognition. It was the woman he had first seen in the waiting-room at Washington. He went directly to her chair, and she rose to meet his outstretched hand.

"This is an unexpected pleasure, Mr. Withrow," she said.

"Indeed it is, Mrs.—" He laughed frankly. "Do you know, I never learned your name all the way down."

His manner was contagious. She laughed in sympathy. "No, I believe it was not mentioned," she acquiesced. "Perhaps I owe you an apology, or possibly no occasion for mentioning my name arose. However, I am Mrs. Payne."

Page bowed. "I am very happy to make your acquaintance, Mrs. Payne," he smiled. "I suppose you feel like an old inhabitant by this time, and can tell me all about the points of interest here, and what one must do to utilize his days to the best advantage. You have been here twenty-four hours, you know. But pardon me, I hope you haven't felt any ill effects from the journey. It is a long, hard trip at best, and to one out of health it must be very trying."

"I did feel rather exhausted when I reached here," she acknowledged, "and yesterday did not leave my room at all; but this morning I am quite strong. I expect to gain very rapidly here, for it seems an ideal place to stay out of doors. That is to be my principal medicine."

"Indeed. Then we must see that you take it in good big doses."

After breakfast he found her on the front piazza, gazing wistfully at the lake.

"It is very beautiful," she said, without turning.

"It is, indeed," he replied; "one of the most beautiful lake views I know; not grand, like the rugged views of Scotland and Switzerland, or even some of those of our northern New England lakes, but peaceful, tropical, restful. You love the water?"

"Yes," she answered, dreamily. "As a child I used to be on the water a great deal. We all liked it, and all were good boatmen. My father taught us to sail and row a boat, and to swim and skate, almost as soon as we were able to walk. But of late years—" She broke off suddenly, adding, "Of late years I have had broader, more beautiful work to do. I have seen very little of the lake."

"There was quite a large family of you?"

"Six—three boys and three girls, and all near enough of an age to be good chums and fond of each other's society. When the oldest was twenty-six, the youngest was seventeen. I was the youngest."

"And are all of you alive now?"

She started as though she had been struck, and flashed on him a look in which was hunger, distress, pride and entreaty.

"I beg your pardon!" he exclaimed, hastily. "I didn't know—I don't wish to pain you. Suppose we go down to that hammock under the cocoanut-palms. It looks very pleasant there, and we can watch the boats going out. See, several are leaving the docks now."

She calmed herself by a visible effort, and followed him down to the hammock. After arranging her in it comfortably, he threw himself upon the ground at the foot of one of the palms.

"You haven't heard from Mr. Payne yet, I suppose?" he asked.

"Indeed I have," she replied, softly; "last evening. Will is very nice about such things. He must have written as soon as he reached home, and the letter followed on the next train. But I beg your pardon," almost gleefully; "I must keep up with the introductions now. My husband's name is William Payne, and he is," the gentleness leaving her face, and her eye suddenly becoming steadfast and searching, "a mechanic, and works in a factory. But perhaps you knew this," inquiringly. "It may be that you inferred it from something he said at the station. You were standing quite near to us, I remember."

"Yes, I heard part of the conversation unintentionally," Page replied, quietly; "and of course I got a general idea of your husband's occupation. It must be very interesting work. I am fond of mechanics, and have devoted quite a good deal of time to experimenting. Indeed, I have a little private machine-shop of my own on a place out West," smiling. "But about your husband, Mrs. Payne. I have met a good many men, and have made it a special study to read them quickly. Often I have been placed where this knowledge or faculty has been of inestimable service, occasionally where it was absolutely necessary. I saw Mr. Payne but a few seconds, but I felt that his was a strong, unique character, forceful in object, and unswerving in purpose, and yet through all gentle and manly. Should the lines of our lives ever be thrown together, I would like such a man for a friend, a personal friend, for I would feel that trust could be reposed in him absolutely."

Mrs. Payne had listened with the light coming back to her eyes, the soft flush to her cheeks. As he ceased, she reached out suddenly and caught his hand. "Thank you for those words, Mr. Withrow," she said, her voice breaking a little. "You can hardly understand what—they mean to me. There were a good many—in my old life—who dropped away; and others who did not know—and met me from time to time later—when they found Will was a—mechanic—dropped away, too. Nearly all of them—did that. It—made me suspicious. I did not care for myself—but for Will. He was better than any of them—than all of them," a sudden passion coming into her voice. "He did not care, of course. He laughed. But I cared—though I tried not to let him see. It—it has been hurting me all these years. It has made me hard—in some things. No, do not go yet," as Page rose. "I—want you to understand. You have seen him—and know what he does—and believe in him. You must have thought it strange—the way I spoke—about his occupation. But he liked you—and I—was afraid you might be like the rest. There—you may leave me now. I am—ashamed—to have acted like this." She looked at him pitifully, her lips trembling. "I have been sick, you know," she finished, simply, "and lose control of myself easily. That is why I am down here. And—and I saw somebody on the train—that—that brought it all up. It was only a resemblance—but she—she passed here this morning—while you were at breakfast. All of these things together—have—have—"

Page placed his hand upon her head, forcing it smilingly back upon the hammock-cushion. "There," he said, chidingly, "don't think any more about it. You are not down here for that. The journey was a hard one, and you are not strong. It may be a week before you entirely recover from the strain. Now lie there perfectly quiet for an hour at least, and fall asleep if you can. But under no circumstances go into the house," warningly. "You are to live out of doors now except when the weather is bad. I shall take a walk. After a while I will come back, and then we may have another talk, a more cheerful one."

It was scarcely half an hour later when he returned, coming up the path with strong, buoyant steps. It was like a tonic to look at him. Mrs. Payne half rose from her hammock, the distress gone from her face.

"I have been in the hammock all the time," she said, smiling a little; "but I could not go to sleep. It was all too strange and beautiful here. I just lay and watched the palm-fronds waving overhead, and listened to the funny calls and exhortations of the crows in the top of that tree yonder. I suppose they were holding a council." She hesitated a moment, then went on, in a lower voice, "I think what you said has done me good, Mr. Withrow, or maybe it was my foolish breaking down. I was weak, and overcharged with nervousness. Now, as my old negro mammy used to say, 'my mind's done freed, an' I kin 'mence to pick up.' Shall we have the talk now?"

"Better than that," he replied, gaily. "How many guests are there in the house—nice ones?"

"I have met only five of them so far—a mother and daughter, an old gentleman with a taste for whist, and two timid, gray-haired maiden ladies who wear beautiful old-fashioned dresses. Why?"

"Because I want you to invite as many of them as you can find to spend the day with us on the lake. Tell them the boat is big and safe, and that we'll have two competent men to look after her. Yes," in answer to the look of delighted surprise that flashed to her face, "we're going to have a day just packed with fun. You're to be chaperon of the party. Explain that to the maiden ladies. And have Mrs. Moore put up a lunch. We are not likely to be back until toward night. No," as he saw she was about to offer some objection, "not a word; and you'd better hurry along. There are two ladies in the doorway now, and they look as though they might be thinking of a walk. Tell them the 'Madeline'—that's the boat's name—will be at our pier here in fifteen minutes; and say that she is capable of carrying twenty, so there'll be lots of room. And, oh yes, if any one wants to fish, there will be a good supply of tackle on board."

Mrs. Payne nodded, and then hurried toward the house, her eyes shining as they had done twenty years before, when trips like this had been part of her life. She forgot that she had walked down to the hammock slowly, like a woman who had lived beyond the elasticity of youth. At the door she paused for a few eager words of explanation to the old ladies, then ran laughing inside. When the "Madeline" came around from the Poinciana dock, she was on the pier with six of her fellow-boarders, all she had been able to find save the old gentleman of whist tendency, who had flatly refused to join them.

It was nearly sunset when they returned, laughing and buoyant. Even the two old ladies were chatting frankly. Mrs. Payne lingered behind the rest to thank Page for his share in the day's pleasure. But at her first words he threw up his hand protestingly.

"None of that, Mrs. Payne," he warned. "You and I are in this racket together. We're to bring those old ladies out for one thing. I think they'll prove quite hilarious with proper training. Then there's the grumpy old fellow to capture. Yes, indeed, we must stir the Cottage to its very foundation. Every day out of doors. Parties and all that sort of thing. To-morrow and the next day I must be away, looking after some land that I've purchased, but I shall depend on you to carry out our plans. Don't let any of the guests cease laughing and talking for a single instant. Perhaps you'd better keep in the lead yourself, for such things are contagious. You—"

"Stop, stop, Mr. Withrow!" she implored, pretending to catch her breath. "I cannot keep up with all that. Besides," her voice becoming more grave, "I don't quite like the idea of you incurring so—so—"

"Much expense," he finished, smilingly. "Don't let that worry you in the least."

When she came out from breakfast the next morning, Mrs. Payne found their boatman of the day before waiting on the piazza, hat in hand.

"The gentleman told me to come around to you every morning for orders, Mrs. Payne," he said. "There's a good breeze, and we can have a nice sail up or down the lake, as you like. Will you make up a party?"

"Mr. Withrow engaged the boat for us, did he?" she hesitated.

"He's hired it for the whole season. It's one of the best boats on the lake, and he wanted to make sure of having it when he liked."

She looked undecided for a moment, then went in and made up a party.

[TO BE CONTINUED]

The Tale of the Cork Leg

"Madam," said the one-legged man to the elderly woman who had taken the seat next to him in a railway-car, "madam, I notice that you observe I have but one leg. I had a cork leg some years ago, which served me almost as well as an ordinary leg, and was in some respects superior to my departed limb. I lost my leg while traveling with a circus, and the general manager very kindly gave me one which had belonged to his deceased father-in-law. It was a little too long, but in every other respect it was perfect. It had the exact shape of a human leg, with the additional advantage of an elaborate system of springs by which the leg could be wound up for hopping. When I was in a hurry I had only to wind up my leg, and I could hop eight and a quarter miles on it without stopping.

"Well, in this show I had general charge of the menagerie, and the special care of our most valuable exhibit, the twomatwitch. Very likely, madam, you have never heard of a twomatwitch, as ours was the only specimen which was ever introduced into America. Its home is in the Norfolk Island, and it lives only on the cones of Norfolk pines, which we had to import to this country at a great expense. It looks and runs like a hare, but it has the skin of a rat, and a tail as large and bushy as a squirrel.

"Now, one evening when I was feeding it from my hand, as was my custom, some hay near its cage caught fire, and the frightened animal leaped from my hand and started for the exit. I had never anticipated such a thing, as the twomatwitch was perfectly docile and had never tried to run away.

"Luckily my leg was wound up, and so I started out hopping after it. I let the speed-catch loose, and rushed ahead as fast as I could. But that twomatwitch was a wonderful runner. It was a perfectly flat prairie country, and a racecourse could not have been smoother. For about five miles he kept an even twenty yards ahead of me. I could not go any faster, and it did not have to. At last I saw the animal was getting tired out. The distance between us very slowly lowered to fifteen yards, and then to ten. The twomatwitch tried making sharp turns, but it could gain only a few yards that way, which I always made up in a short time. Its case was fast growing helpless. Just when I was within five feet of the animal it dived into a prairie-dog hole and left me alone—yes, alone. Not a person in sight. The night was warm, so I thought I'd rest there till the men who would come out after me should find me. I wound up my leg in case I should need it, unhitched it, and placed it securely over the hole so that the twomatwitch could not get out. I then picked out a comfortable place, and lay down to rest, for I had been considerably jolted.

"I had lain there about half an hour, when I heard a noise. The twomatwitch was scratching against my leg. When I crawled over to the hole, the leg had somehow righted itself (there was a spring to do that, and the little beast had probably touched it), and there was my leg running after the twomatwitch.

"As my leg did not have to carry the weight of my body, it hopped a great deal further each time, and went ahead with lightning speed. It became smaller and smaller, till it finally looked like a very little gnat jumping up and down, and at last it seemed to leap off the edge of the horizon.

"Now I was in a pretty fix—leg gone; twomatwitch gone; no food; no drink. For two days I lay there, madam, without nourishment of any kind. I could not hop on my other leg, and it was almost useless to crawl, as I should have starved before I could have found aid. Toward evening of the second day a cowboy approached on horseback. He tied me up in a neat bundle, and carried me back to town. He said he had seen the tracks of a solitary foot on the banks of the Platte. So my poor leg had jumped into it, and was now probably lost in some quicksand bed of that treacherous river. Pardon these tears, madam, I cannot speak of its fate without emotion.

"Can you kindly give me a small sum to buy a new leg?"

She looked at him sympathetically. A tear stole into her eye. She opened her hand-bag, and took from it a card, which she gave to the unfortunate man. He seized it eagerly, and read: "Can you do something to help a poor deaf-and-dumb woman?"—Harper's.

The holiest of all holidays are those
Kept by ourselves in silence and apart;
The secret anniversaries of the heart.
When the full river of feeling overflows;
The happy days unclouded to their close;
The sudden joys that out of darkness start
As flames from ashes; swift desires that dart
Like swallows singing down each wind that blows.

—Longfellow.

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fering, I would need no further argument to convince you of my ability. I have passed the experimental stage. I know what I can do. No matter what your disease. I have cured many cases of Consumption, Bright's Disease, Locomotor Ataxia and Partial Paralysis that other doctors pronounced incurable. No matter how many doctors or patent medicines you have tried. The majority of my patients had tried all these in vain before they came to me. **I can cure you.** This is a strong statement, but I am willing to show my faith in my own ability.

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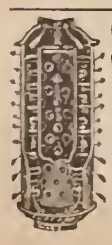

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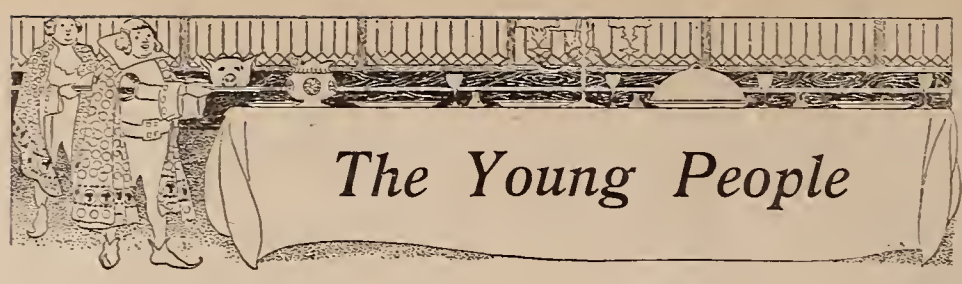

Character Costumes

IN VIEW of the New-Year's festivities drawing near I am sure a good many of my readers will appreciate some fancy-costume sketches, with instructions how to make the dresses illustrated.

Fig. 1 illustrates a native Welshwoman's dress—the frock of some dark texture, a plaid shawl, white muslin apron and cap, and a tall hat. In her right hand she carries some knitting, and in her left hand a basket of ferns. Navy serge or any dark woolen material of a coarse texture may be used for the dress; or for a smarter one black satin or claret-red cashmere, trimmed around the skirt with one row of black velvet ribbon. The skirt is cut with a shaped front gore, and the remainder of straight widths sufficient to make it about three and one fourth or three and one half yards around the lower edge; the top one is gathered or plaited all around from the seams of the front width, and secured to the bodice. The shawl is a half square, the front corners just tucking into the bodice. Any plaid material fringed out would serve for the occasion, but if the skirt is of satin the shawl must be of silk. The mob-cap worn under the hat is made of muslin. A piece is cut almost circular, and the outer edge gathered, so that the top part stands up rather more than the remainder; the edge is made neat with a little band, which turns under when on, and a frill of lace is sewn to the edge of the band where the gathers are inserted. The hat is easily manufactured from cardboard, cheap black satin and some paste. Cut a circular brim the necessary size, then for the crown roll a piece of cardboard round, so that the bottom edge is the size of the inner one of the brim, and to a sugar-loaf shape; secure this, and then sew a piece into the top the required size. Cover each part with satin, placing a piece on the top first, then around the sides, with a turned-in edge to meet the top; then cover the brim and join it to the crown so that all the edges of the satin are made neat underneath. The satin may be either pasted or sewed on, as preferred. The stockings are black, and the shoes patent-leather buckle ones. Four and three fourths or five yards of forty-six-inch-width material are sufficient for the dress.

FIG. 2

Fig. 2 illustrates a shepherdess or Little Bo-Peep. A child's toy lamb is generally added. The skirt, when made of quilted sateen or satin, may be of either pale blue, pink or pale yellow, and the upper part of a pretty floral design containing those shades or without the yellow. I think a pink skirt and blue and pink upper part is the prettiest arrangement. A small fichu of cream muslin is arranged over the V-shaped edge of the top of the bodice. The fastening down the center of the front is by a blue silk lace. Muslin frills decorate the short elbow-sleeves, and mitts are worn. The Dolly Varden hat—though a leghorn may be correctly worn—is trimmed very daintily and prettily with dogroses, tulle and narrow blue ribbons. A bouquet to match decorates the front of the bodice. The mitts and stockings match the skirt, and the shoes are blue satin with pink rosettes and elastic sandal-strings. The crook, covered with gold or silver paper or enameled, is decorated with streamers of the two colors. The skirt must be cut to set well and plainly over the hips, with fullness at the back to be gathered. A thin muslin lining is best; stitch it with pink silk, and do not quilt the upper part that is covered by the drapery. The bodice is cut to an ordinary tight-fitting shape, with a sharp-pointed basque at back and front. It is prettier if made without a seam down the back, and only one dart on each side of the front instead of two. This dart should have a good slope, the upper point being about at the same place as the top of the second dart would ordinarily come, and the lower end at the edge of the basque where the front one would terminate, in which case the point of the waist would be midway between the two as usually taken up. I detail this, as upon the slope of the dart depends the smart or homely effect of the entire front. An easy way to arrange the drapery is to have a long length of the material, and drape it on the figure. Take a good fold under at the front selvage, and lay four other folds over that; place these under the extreme front of the basque edge; drape it around to the back part of basque, pushing the corner up under the bodice (to be cut off afterward), to make it lie smoothly as illustrated, from the front plaits to over the hip, and not taking up all the width in the plaiting at the back, but operating from the upper part so as to get the desired effect; then arrange the loops at the middle of the back so as to be nicely bunchy, the lower part to almost reach the lower edge of the skirt, and secure it as may be necessary.

FIG. 3

Cut the sleeves with only one seam, and place a small fold of the material over the edge of the frill or else put the latter on with a small heading.

To cut the skirt, allowing for it being thirty-six inches long, cut the front width with the material folded down the center, measuring across from the center fold four and one half inches at the top, the outer corner one inch above the top at the fold, eleven inches at the lower edge, and this curved to make the length agree with that of the center front; for the side gore measure seven inches across, and curve up one inch from the top of the selvage edge of the gore, a dart to be taken up in the center to fit the hip, and nineteen at the lower edge curved as required, nine at the top of the back gore curved up one and one half inches, and twenty-four at the lower edge. After cutting out the front, double the length of sateen and cut the side gores with their lower edges to the cut ends, when the back ones will come out from the remainder of the width, placing them the reverse way. The whole will require four yards of thirty-one-inch sateen and six and one half or seven yards of the fancy. For this a design in which the stripes run both ways equally should be chosen, so as to permit of its being cut either way up. About twelve yards of ribbon, one and one fourth yards of muslin and flowers are required.

FIG. 1

While the foregoing design is especially and exclusively suitable for a blonde with a pink and white skin, to enhance which one or two black patches should be worn—one on the chin and another on the cheek near the eye—Fig. 3 is as exclusively for a brunette's wear, and as the illustration shows, signifies "Night." The dress is of black net spangled with silver over a foundation of black dull muslin; the stars and wand are of silver, the gloves and slippers of black suede, and the stockings black. The measurements given for the preceding skirt will do nicely for the foundation of this one, over which the accordioned net is arranged. The stars are put on afterward. The baby bodice is joined to the skirt, and both fastened down the center of the back. A large star decorates the front. Plain chiffon is used for draping the shoulders and also for the sleeves. Silver sequins to sew on the dress may be purchased, but for the very large ones silver paper on cardboard will have to be used, or else cloth of silver, which is very expensive. From eighteen to twenty yards of net will be required, and one and one half yards of chiffon.—Rosalind E. Payne.

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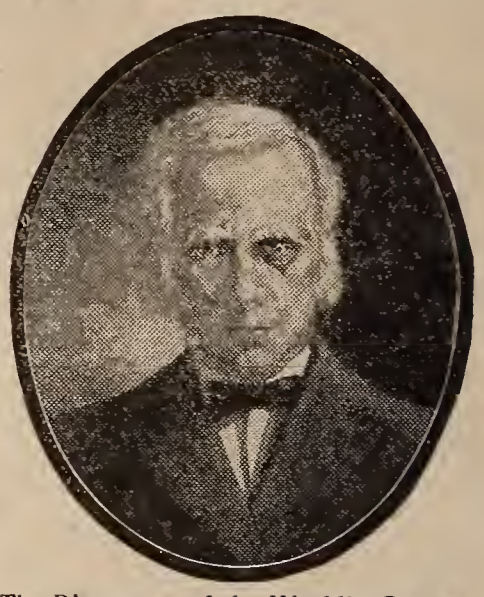

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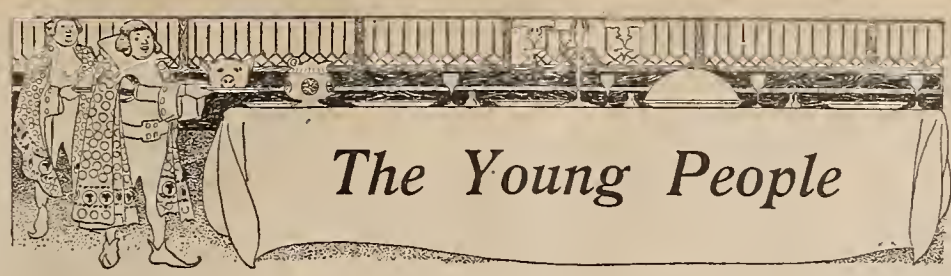


A School-Girl Author

Dorothy Menpes is the youngest addition to the list of English authors. She is a school-girl, fifteen years old, but three of her books have already been published, and she is now working on a fourth, for her publishers have already received a large number of advance orders.

Dorothy's father is Mortimer Menpes, the celebrated artist, war-correspondent and traveler. He has trained her mind ever since she was a baby, teaching her to see things with the eye of an artist, and encouraging her to write down her impressions as well as she could. She has had plenty of opportunity to develop her powers of observation, as her father has taken her with him in nearly all his travels. Everywhere she went in Brittany, Japan, Germany or Italy he taught her to see things understandingly and to remember them.

As war-correspondent in South Africa Mr. Menpes had a great deal to tell about places he had seen and people with whom he had come in contact.

It occurred to Miss Dorothy that her father's stories would make a great book. Whenever she heard him talking to friends she remembered all he said. After they were gone she would write it all down, and soon she had the book ready for publication, with a great many drawings by her father to illustrate it.

Her book on Japan also has beautiful illustrations from her father's brush. The little authoress refuses to take credit for the great popularity of this second book, which ran into five editions.

"Do you think," she says, "that any one would care to read what I wrote if they had not father's pictures to look at as well?"

Miss Dorothy's fourth book, on which she is working at present, is "The World's Children." This she hopes to bring out in the spring, with proofs and illustrations from her father's pen and brush. Her friends think it promises to be a greater success than "The World's Pictures."—Woman's World.

President Roosevelt and the Kittens

President Roosevelt and Secretary Root were returning from a horseback-ride, when something occurred to throw a new light on the character of the strenuous fence-jumper and lion-tamer. They suddenly heard cries of distress near by.

"What is it?" asked Secretary Root.

"Kittens, I think," replied the President, turning his horse around, "and they seem to be in distress."

Then the chief magistrate began an investigation, and discovered that the melancholy chorus issued from the open catch-basin of a sewer.

The President beckoned to two urchins, who, from an awed distance, were admiringly watching the performance.

"Will one of you boys crawl into the opening while the other holds his legs?" President Roosevelt asked.

Sport like that with the greatest personage in the United States as umpire could come reasonably only once in a lifetime, and the boys fairly tumbled to the opportunity.

"That's the stuff!" exclaimed the President. "Now, what do you find there?"

"Cats in a bag," shrilled the boy with his head in the sewer. The other boy sturdily clung to his companion's legs. The kittens, unaware that their plight had stirred the sympathies of the head of a nation, and that their deliverance was at hand, wailed as if a new calamity were about to strike.

"Drag them out," came the command from the President.

In a moment the President of the United States, the Secretary of War and the two youngsters stood around the rescued litter. Three forlorn kittens struggled feebly. Then the wrath of the leader who has slaughtered wild game, and shot down armed men in battle, blazed into epithets upon the wretch who had flung the kittens to die in slow agony.

The commotion brought out a wondering butler from a neighboring residence.

"Will you care for these little kittens?" asked the President. "Will you give them milk and a place to live?"

Had the man been asked to accept a cabinet portfolio he could not have responded with more heartfelt eagerness.

The President thanked him, told the astonished urchins they were little men, and, joining Secretary Root, continued on his way to the White House.—Saturday Evening Post.

Follow Directions

Which is the way to Easy Street,
Where placid people rally?
To get to that desired retreat,
You work up Hustle Alley.
—Wayside Tales.

The Remorseful Cakes

A little boy named Thomas ate
Hot buckwheat cakes for tea—
A very rash proceeding, as
We presently shall see.

He went to bed at eight o'clock,
As all good children do,
But scarce had closed his little eyes,
When he most restless grew.

He flopped on this side, then on that,
Then keeled upon his head,
And covered all at once each spot
Of his wee trundle-bed.

He wrapped one leg around his waist,
And tother round his ear,
While mama wondered what on earth
Could ail her little dear.

But sound he slept, and as he slept
He dreamt an awful dream
Of being spanked with hickory slabs
Without the power to scream.

He dreamt a great big lion came,
And ripped and raved and roared,
While on his breast two furious bulls
In mortal combat gored.

He dreamt he heard the flop of wings
Within the chimney-flue,
And down there crawled, to gnaw his ears,
An awful bugaboo!

When Thomas rose next morn, his face
Was pallid as a sheet;
"I never more," he firmly said,
"Will cakes for supper eat!"
—Eugene Field.

The Unhappiest Boy in the World

The unhappiest boy in the world must surely be the fifteen-year-old Archduke Karl, heir to the throne of Austria-Hungary. He was born to be the heir of the most ancient reigning family in Europe, to vast revenues and imperial possessions, but he was also born to splendid misery. He is deprived of all the joys which make life pleasant to the ordinary boy.

The crown jewels of Austria, which will be his some day, are valued at fifteen million dollars. He will inherit twenty castles. The great palace in Vienna is as large as a town. In the meantime he receives an allowance of forty thousand dollars a year, but of course he is not allowed to spend a cent of this. The bulk of it is kept in the bank for him, while what is necessary for his daily expenses is expended by his tutors.

There are eighteen of these tutors, and with them the poor lad has to work from morning to night, learning all the things a great sovereign has to know. This is his usual day's routine: Get up at five every morning; bathe, exercise, study until eight; then breakfast. Study again from nine until twelve o'clock. He has a simple lunch at noon, and from one to three is given up to his military training, which includes riding, fencing, sword-drill, trench-digging, etc. He goes to his books again at four-thirty, and at six o'clock stops for his dinner, which is a long, tiresome, ceremonious meal. After that he is allowed to spend one hour of recreation with his mother and his youngest brother. His father is a reckless, drunken, disreputable person who is divorced from his mother. After one hour of family sociability out of the whole day Archduke Karl is promptly put to bed. This young boy must be perfectly familiar with thirteen different languages that are spoken in the Austrian empire. Besides that he must study modern languages, classics, mathematics, geography, literature and history on a very elaborate scale in order to give him the peculiar knowledge needed for his duties on the throne.

Twice a week he is taken to a lecture at the Schotten High School in order that he may know something of the course of studies in a public school. He is not permitted to mingle in the slightest degree with the other boys. He sits alone on a front bench surrounded at a respectable distance by his chief tutor, Count Wallis, and seventeen other tutors, and by a large number of private detectives, for the life of every member of the imperial family is in danger. And after all, politicians say, Austria-Hungary, made up of so many different races, tongues and religions, will go to pieces before this hard-worked boy grows up. Poor Archduke Karl!—Woman's World.

Talents

"I remember," said grandma, "when I was a little girl of seven years old, my father kept a butler—a very solemn, but a very kind, old man.

"Every night, when, exactly as the clock struck eight, my aunt sent me out of the dining-room to go up-stairs to bed myself—for little girls were brought up very strictly in those days—old Thomas was always waiting in the hall to hand me my little brass candlestick, to light me up the stairs to the room. I always said, 'Good-night, Thomas,' and he would reply in a very slow, solemn way, 'Good-night, Miss Nannie; don't forget to take account of your servants.'

"What he meant was this: My Uncle William, who had come home from India when I was about six years old, had been very kind to me while he stayed with my father, because he saw that I was a very lonely little child in a very big, empty house; for I had neither mother, brother nor sister. So he would often take me on his knee and tell me Bible stories.

"One day, when we were sitting together in an old summer-house in the very small back garden which town houses generally have, he told me the parable of the 'Talents.'

"'Nannie,' he said, 'I am going away very soon, and I want you to promise me that every night before you get into bed you will "take account of your servants."

"'There are many "talents" God has given to other children, and not to you, for you are a lonely little girl—no mother to love you, no brothers or sisters to play with you; but there are many "talents" you have which some children have not.

"'See here,' he said, taking my little hand in his, 'here are ten little fingers, and down there inside your shoes are ten little toes; and inside that mouth is a little tongue; and at each side of this neat, brown head is an ear; and looking straight up at me are two brown eyes. Now, these are all your servants, or "talents," given to you by God to use—while many little children are lame or dumb or deaf or blind—and you are his little servant, and I want you every night to "take account of your servants," and find out if they have been pleasing God, or only pleasing yourself, all through the day.

"'For all those servants of yours are "talents," or gifts, from God, and he is watching every day now what you give them to do, and one day he will make you give an account of their doings.'

"And then, after I had promised to do as he told me, he kissed me, and set me down, and away I ran to my kind old friend Thomas, to tell him in my own way all that Uncle William had said.

"And from that time until my aunt took me away to live in the country, old Thomas never forgot every night to say, 'Don't forget to take account of your servants, Miss Nannie.'"—Great Thoughts.

Fun and Frolic for the Frivolous

How to Eat Candles.—Cut from an apple as perfect an imitation of a tallow candle as possible. Get a sweet almond, and cut the wick. Light this wick an instant (it will flame up brightly), blow it out, and place this charred wick in the top of the candle, and you are ready to amuse your crowd of young people. When all is in readiness, stand before the assembled crowd, and make a speech. Say that you have been a great traveler, and that among the wonderful things you learned while away was that of eating candles. Then light your wick, let it burn a moment (to prove that it is genuine), then pop it into your mouth. It will immediately go out, and you can begin eating the entire candle, much to the astonishment and amusement of the assembled guests.

How Much? or Brother Jonathan.—This is a game which may be played indoors or out at pleasure. Procure a square board, and mark off sixteen squares on it. Within these small divisions place numbers ranging anywhere between 1 and 500. These numbers are not to be placed regularly, but are contrasted so that the smallest values are next the higher. Thus we might say the first row be marked 80, 20, 500, 4; the next row might have in its squares, 400, 10, 50, 300 and so on. The players stand a fixed distance from the square, and throw a cent, and make their count according to the number in the square the penny hits. If it is not entirely within the square, nothing is gained. One thousand is usually the game, but the players can fix upon any sum beforehand if this number is thought too large or too small. The company may be divided into sides, which are pitted against each other. This adds to the enjoyment somewhat. Ella Bartlett Simmons.

6 Silver-Plated Teaspoons

and Farm and Fireside one year, for only

75 cents

Or, Given FREE for THREE yearly subscriptions to the Farm and Fireside at 35 cents each

Set No. 60—Cut shows the ACTUAL SIZE

Nickel-Silver Base The base of this ware is solid nickel silver, which is white all the way through, positively will not change color nor rust, and will wear for a lifetime. It is the highest grade known, being full twenty-five-per-cent nickel.

Coin-Silver Plate On top of this nickel-silver base is plated the full STANDARD amount of pure coin-silver. This combination makes a ware which we guarantee to give satisfaction. Test it, and if not found exactly as described, return it to us and we will refund the money.

Initial Letter Each spoon is engraved free of charge with an initial letter in Old English. Only one letter on a piece. Be sure to name the initial desired.

Pattern We have the spoons in two beautiful patterns, No. 60 and No. 14. You can make your choice of pattern. Where no choice is named we will fill orders with our selection. We also reserve the privilege of substituting one pattern for the other if the supply in any particular initial is exhausted. We can thus fill all orders the same day they reach us. It is impossible to describe the beauty of these spoons, and the illustration falls far short of conveying a full idea of their attractiveness. In finish they are perfect, and will render complete satisfaction.

GUARANTEE

We absolutely guarantee every piece of this ware to be exactly as it is described and to give entire satisfaction or your money will be cheerfully refunded. We are sure it will please you.

(When this offer is accepted no cash commission can be allowed, and the name cannot count in a club toward a premium)

POSTAGE PAID BY US IN EACH CASE

Address

FARM AND FIRESIDE

Springfield, Ohio

The Farm and Fireside

Beautiful Three-Sheet ART CALENDAR

New Design **FREE** New Design

NO ADVERTISING ON THIS CALENDAR

Order as No. 19

Full Size of Sheets, 10 by 13 Inches Sent Postage Prepaid

This Calendar Makes a Beautiful Present

REDUCED ILLUSTRATION

This Beautiful Art Calendar that we illustrate above is one of the most exquisite and appropriate calendars that we could find anywhere. The drawings are by one of the most celebrated artists, and strictly new and exclusive in design. We feel sure that every one receiving one of these beautiful calendars will be more than pleased with it. This calendar is lithographed in ten beautiful colors.

The Calendar Consists of Three Sheets

EACH 10 BY 13 INCHES

Each sheet has its own individual drawing, and has four calendar months lithographed in a unique design on the corner.

On each sheet is represented a type of a beautiful little girl.

This calendar, taken as a whole, we believe is one that will be universally admired by all who see it. We cannot do it justice here in the illustration or description. **You must see it.** Place your order early, and don't miss this beautiful work of art.

A New and Different Design

This is an entirely new and different design from the one advertised in previous issues of the FARM AND FIRESIDE, and we believe that it is even **more beautiful.** Place your order early, and **order this Calendar as No. 19.**

We will send this Beautiful Three-Sheet Calendar, and the FARM AND FIRESIDE one year, to any address for only . . . **40 Cts.**

FREE This Calendar will be given to any one sending ONE yearly subscription to the FARM AND FIRESIDE at the regular clubbing price, 35 cents. The only condition is that it must be a new subscription and a name not now on our list.

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO

Wit and Humor

Leniency

"WHAT did you do with that fellow who stole the horse?" asked the tenderfoot.

"Nothing much," answered Broncho Bill; "jist took the hoss away from him."

"Is that all?"

"Yep. He war settin' in the saddle with a rope around his neck tied to a tree when we took the hoss away, though."—Washington Capital.

No Incentive for Dash

"I dunno what to do 'bout Josh," said Farmer Corntossel. "He don't seem to have much enterprise."

"You've been complainin' 'bout the boy ever sence we went to that theayter," replied his wife, reprovingly. "You've gone ahead an' cleared all the debts off the place, an' ef there ain't any incentive for Josh to go out in the world an' hustle, so's he can come back an' lift the mortgage jes' as the landlord is about to foreclose, it's your fault."—Washington Star.

His Talent

Si—"I thought Hank was to college fer a career as preacher."

Hi—"So he was; but from the big bills he kep' sendin' in, I thought I oughter make a doctor o' him."—Chicago News.

He Wasn't Quite Sure

It was but a comparatively short time ago that the old rules of the English courts were in full force and vigor in the conservative state of South Carolina. Thus it was distinctly provided that each attorney and counselor while engaged in a trial must wear "a black gown and coat." On one occasion James L. Pettigrue, one of the leaders of the bar, appeared dressed in a light coat.

"Mr. Pettigrue," said the Judge, "you have on a light coat. You cannot speak, sir."

"Oh, Your Honor," Pettigrue replied, "may it please the court, I conform to the law."

"No, Mr. Pettigrue, you have on a light coat. The court cannot hear you."

AS GOOD AS A CIRCUS

Mrs. Newyfe—"Did you enjoy your dinner, my poor man?"
Weary—"Enjoy it! Why, ma'am, I almost laughed myself to death over dese croquettes!"

A Joke that Failed

"Tell the court just how it happened," urged the lawyer. "Why did you hit this man?"

"Well," replied the prisoner, "it was this way. Ye see, yer honor, Oi was walkin' down th' shtrate, an' Oi met this felly ladin' a yellow dog. 'Oh, ho,' says Oi, thinkin' to joke a bit, 'what koind iv a dog is that yez be ladin?' 'An Oirish setter,' says he."—Record-Herald.

Our Beautiful Language

A boy who swims may say he's swum; but milk is skimmed, and seldom skum, and nails you trim, they are not trum.

When words you speak, those words are spoken; but a nose is tweaked, and can't be twoken, and what you seek is never soken.

If we forget, then we've forgotten; but things we wet are never wotten, and houses let cannot be lotten.

The goods one sells are always sold; but fears dispelled are not dispold, nor what you smell is never smoled.

When young, a top you oft saw spun; but did you see a grin e'er grun or a potato neatly skun?—London Tit-Bits.

"But, Your Honor," insisted the lawyer, "you misinterpret. Allow me to illustrate. The law says that a barrister must wear 'a black gown and coat,' does it not?"

"Yes," replied the Judge.

"And does Your Honor hold that both the gown and the coat must be black?"

"Certainly, Mr. Pettigrue; certainly, sir," answered His Honor.

"And yet it is also provided by law," continued Mr. Pettigrue, "that the sheriff must wear 'a cocked hat and sword,' is it not?"

"Yes, yes," was the somewhat impatient answer.

"And does the court hold," questioned Mr. Pettigrue, "that the sword must be cocked as well as the hat?"

"Eh—er—h'm," mused His Honor, "you—er—may continue your speech, Mr. Pettigrue."—Success.

But Will He?

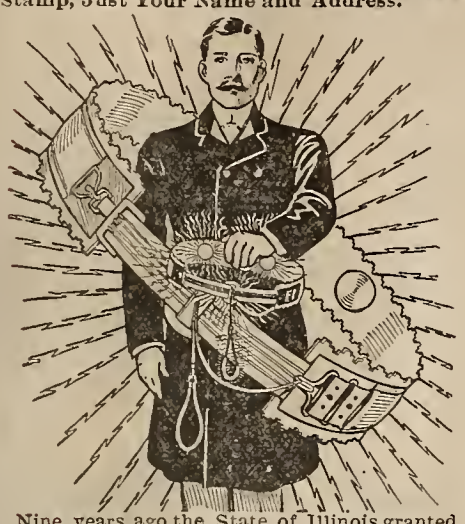
The doctor came, and said that he
Would make another man of me,
"All right," said I; "and if you will,
Just send the other man your bill."
—Philadelphia Record.

AIR TO THE THRONE

An Electric Belt Free

Send Your Application At Once To The Physician's Institute.

They Will Send You Absolutely Free One of Their 100 Gauge Supreme Electric Belts, the Belt Which Has Made so Many Wonderful Cures—You Needn't Send Even a Postage Stamp, Just Your Name and Address.



Nine years ago the State of Illinois granted to the Physicians' Institute of Chicago a charter.

There was need of something above the ordinary method of treatment for chronic diseases, something more than any one specialist or any number of specialists acting independently could do, so the State itself, under the powers granted it by its general laws, gave the power to the Physicians' Institute to furnish to the sick such help as would make them well and strong.

Ever since its establishment this Institute has endeavored in every possible way to carry out the original purposes of its establishment under the beneficent laws of the State.

Five years ago, the Physicians' Institute, realizing the value of electricity in the treatment of certain phases of disease, created under the superintendence of its staff of specialists an electric belt, and this belt has been proved to be of great value as a curative agent. From time to time it has been improved until it reached that stage of perfection which warranted its present name of "Supreme."

This belt is the most effective of all agents in the cure of rheumatism, lumbago, lame back, nervous exhaustion, weakened or lost vital functions, varicocele, kidney disorders and many other complaints.

This "Supreme Electric Belt" is made in one grade only—100 gauge—there is no better electric belt made and no better belt can be made. Whenever in the opinion of our staff of specialists the wonderful curative and revitalizing forces of electricity will cure you we send you, free of all cost, one of these Supreme Electric Belts. It is not sent on trial, it is yours to keep forever without the payment of one cent. This generous offer may be withdrawn at any time, so you should write today for this free "Supreme Electric Belt" to the Physicians' Institute, 1773 Unity Building, Chicago, Ill.

For all who have weak Lungs

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering I will send free of charge to all who wish it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming the paper.

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Dr. Coffee Cures all Eye Diseases at Home

80-page eye book Free

Dr. Coffee wants to send his famous 80-page illustrated book on "Eye Diseases" Free to every reader of this paper, who is afflicted with Cataracts, Glaucoma, Granulated Lids, Sore Eyes, Ulcers, Scars, Spots on Eye, Weak Eyes, Failing Vision or any kind of eye trouble. This book tells how you can cure yourself and restore your sight perfectly, at your home. Very small expense. Big free book tells how to prevent blindness, gives rules of health, physical culture exercises, etc.

Dr. Coffee restored sight to Miss Lulu Tait, Emmetsburg, Iowa, after six surgical operations left her blind. He cured M. B. Powles, Jackson, Mich., after three surgical operations made one eye blind. Thousands of remarkable cures of all kinds of eye diseases. Dr. Coffee's professional opinion free to all who tell about their case. Write today—don't wait to go blind. Address,
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Send small bottle of your morning urine. I will make analysis and forward opinion of case free. If tired of being experimented upon by physicians who guess at your disease, consult a water doctor. Interesting 68-page book free. Mailing case for urine furnished on receipt of 2c-stamp. Dr. C. D. Shafer, 205 Garfield Place, Cincinnati, O.

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Wit and Humor

Jus' Keep on Keepin' On

If the day looks kinder gloomy,
An' your chances kinder slim;
If the situation's puzzlin',
An' the prospects awful grim,
An' perplexities keep pressin'
Till all hope is nearly gone,
Jus' bristle up, an' grit your teeth,
An' keep on keepin' on.

Fumin' never wins a fight,
An' frettin' never pays;
There ain't no good in broodin' in
These pessimistic ways—
Smile jus' kinder cheerfully
When hope is nearly gone,
An' bristle up, an' grit your teeth,
An' keep on keepin' on.

There ain't no use in growlin'
An' grumblin' all the time
When music's ringin' everywhere,
An' everything's a rhyme—
Jus' keep on smilin' cheerfully
If hope is nearly gone,
An' bristle up, an' grit your teeth,
An' keep on keepin' on.
—New Orleans Times-Democrat.

His Reason

Dusty Rhoades—"Willie, I hear yer fodder was a preacher."

Weary Willie—"He was, Dusty."

Dusty Rhoades—"Well, wid prospects like dose how did yer come to do de hobo act?"

Weary Willie—"He had a country congregation dat paid his salary in cordwood, an' I had to cut it up into kindlin'."—Philadelphia Telegraph.

UNNECESSARY

Staylate—"Well, I must think about going."

Miss Weerie—"Oh, why must you THINK about it?"

Natural Inference

Mrs. Gridley had not been well enough to go to church; nevertheless, her son Bobby was required to attend as usual.

"Now," said she, when he came in, "what was the sermon about, Robert?"

"The sermon?" replied the boy. "Well, I don't know; it was sort of rambling-like. But judging from the text, I guess it was about cash-boys."

"Nonsense," she remarked. "What put that into your head? Pray, what was the text?"

"'All the days of my appointed time will I wait, till my change come.'"—Youth.

What Did She Mean?

They were at supper. Between the courses the young man with the voracious appetite discoursed eloquently on things in general.

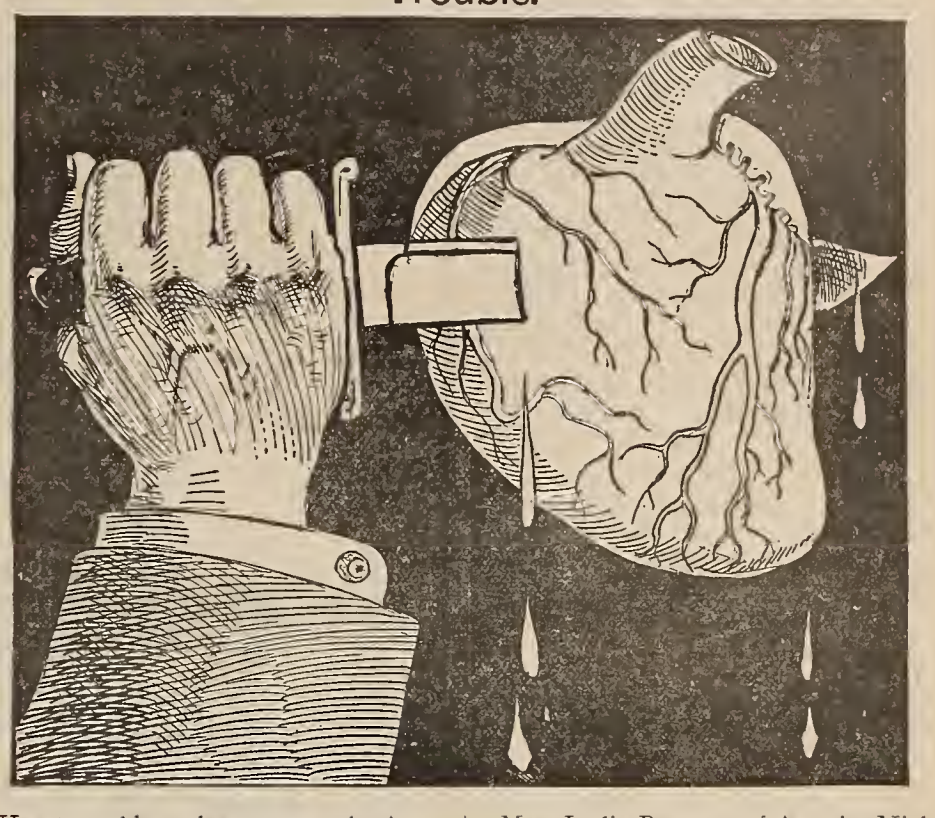
"Do you know, Miss Dash," he remarked, "I think there is a very intimate relation between our food and our character. I believe, don't you know, that we grow like what we are most fond of."

The fair girl smiled sweetly. "How interesting!" she murmured. "May I pass you the ham, Mr. Jones? I am sure you will like it."

After this the young man relapsed into deep thought.—London Answers.

Heart Disease

Some Facts Regarding the Rapid Increase of Heart Trouble.



Heart trouble, at least among the Americans, is certainly increasing, and while this may be largely due to the excitement and worry of American business life, it is more often the result of weak stomachs, of poor digestion.

Real organic disease is incurable; but not one case in a hundred of heart trouble is organic.

The close relation between heart trouble and poor digestion is because both organs are controlled by the same great nerves, the Sympathetic and Pneumogastric.

In another way, also, the heart is affected by the form of poor digestion which causes gas and fermentation from half-digested food. There is a feeling of oppression and heaviness in the chest, caused by pressure of the distended stomach on the heart and lungs, interfering with their action; hence arises palpitation and short breath.

Poor digestion also poisons the blood, making it thin and watery, which irritates and weakens the heart.

The most sensible treatment for heart trouble is to improve the digestion and to insure the prompt assimilation of food.

This can be done by the regular use after meals of some safe, pleasant and effective digestive preparation like Stuart's Dyspepsia Tablets, which may be found at most drug-stores, and which contain valuable, harmless digestive elements in a pleasant, convenient form.

It is safe to say that the regular, persistent use of Stuart's Dyspepsia Tablets at meal-time will cure any form of stomach trouble except cancer of the stomach.

Mrs. Lydia Bartram, of Assyria, Mich., writes: "I have suffered from stomach trouble for ten years, and five different doctors gave me only temporary relief. A Mr. E. R. Page advised me to try Stuart's Dyspepsia Tablets, and four boxes did me more permanent benefit than all the doctors' medicines that I have ever taken."

Mrs. G. H. Crotsley, 538 Washington Street, Hoboken, N. J., writes: "Stuart's Dyspepsia Tablets just fill the bill for children as well as for older folks. I've had the best of luck with them. My three-year-old girl takes them as readily as candy. I have only to say 'tablets,' and she drops everything else and runs for them."

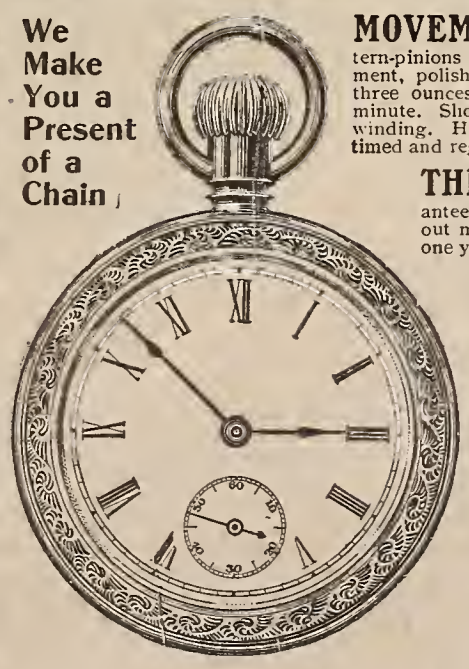
Miss Lelia Dively, 4627 Plummer Street, Pittsburg, Pa., writes: "I wish every one to know how grateful I am for Stuart's Dyspepsia Tablets. I suffered for a long time, and did not know what ailed me. I lost flesh right along, until one day I noticed an advertisement of these tablets, and immediately bought a 50-cent box at the drug-store. I am only on the second box, and am gaining in flesh and color. I have at last found something that has reached my ailment."

Phil Brooks, Detroit, Mich., says: "Your dyspepsia cure has worked wonders in my case. I suffered for years from dyspepsia, but am now entirely cured, and enjoy life as I never have before. I gladly recommend them."

Full-sized package of these tablets sold by druggists at 50 cents. Little book on stomach troubles mailed free. Address F. A. Stuart Co., Marshall, Mich.

This Watch FREE

We Make You a Present of a Chain



MOVEMENT Regular sixteen-size and only three eighths of an inch in thickness. Lantern-pinions (smallest ever made). American lever escapement, polished spring. Weight, complete with case, only three ounces; quick-train, two hundred and forty beats a minute. Short wind; runs thirty to thirty-six hours with one winding. Heavy bevel crystal. Bezel snaps on. Tested, timed and regulated. This watch guaranteed by the maker.

THE GUARANTEE In every watch will be found a printed guarantee, by which the manufacturers agree that if without misuse the watch fails to keep good time within one year, they will, upon its return to them, with five cents for postage, repair it free of charge, and return it.

Description—Plain Center Band, Elegant Nickel Case, Snap Back, Roman Dial, Stem-Wind, Stem-Set, Medium Size, Oxidized Movement-Plate, Open-Face.

BOYS

Do you want to get this watch?

If so, **send us your name and address on a postal-card to-day**, and ask for a book of six coupons, and say you want the watch. We will send by return mail a receipt-book containing six receipts, each one of which is good for a year's subscription to the FARM AND FIRESIDE, one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself. You sell these receipts to your friends and neighbors at 35 cents each. They will gladly take advantage of a chance to get a good paper one year for 35 cents. When the receipts are sold, you send the money to us, and we will send you the watch. **Hundreds have earned watches by our plan, and you can do it in one day's time. Write to-day. Be sure to ask for a book of six coupons.**

Address FARM AND FIRESIDE, Dept. N, Springfield, Ohio

PERMANENT OCCUPATION FOR MEN IN EVERY locality distributing samples, circulars, etc. We have millions of pieces for distribution and want men to do the work. GOOD PAY. ATOZ, SOUTH WHITLEY, IND.

RUPTURE CURED while you work. You pay $4 when cured. No cure no pay. ALEX. SPEIRS, Box 260, Westbrook, Maine.

Selections

Care of the Ears

In the proper care of the ears in childhood two things have to be considered—the local conditions of the ears, and what is equally important, the general state of the child's health.

As to the care of the ear itself, it must always be remembered that the hearing apparatus is a piece of very delicate mechanism, no more suited to rough treatment than is the ball of the eye. It can be easily injured by the introduction of a foreign body, or by a blow from the outside. Small children sometimes push things into their ears by way of experiment. In this case the child's guardians should keep perfectly cool, and send for a physician at once. The child must not be shaken and punished until the object is removed, and above all the nurse or mother must not grope for it with hair-pin or tweezers, for that is the way to push it further in, or to wound, or even rupture, the delicate drum-membrane—an accident which may be followed by complete deafness, and even death, should serious inflammation ensue.

There is perhaps one exception to this rule of leaving a foreign body alone until the doctor comes. Occasionally insects fly into the ear, and cause great anguish by buzzing and fluttering about. They can be speedily disposed of by dropping in a little sweet-oil or luke-warm salt-water.

As to injury from the outside, children should be carefully guarded against any games which include loud shoutings directly into the ear, and it is surely needless to add that pulling the ears, and above all boxing the ears, as a form of punishment, should be held a criminal offense. It may induce partial and temporary deafness, complete deafness, and even death, and if indulged in by a teacher should be followed by arrest and public rebuke.

The care of the general health as it affects the hearing is most important in young children, particularly as regards the subject of ventilation, especially at night. Many children who get enough fresh air in the daytime are kept half-suffocated at night. Nursery windows must be kept open, nurses must not be allowed to close ventilators without permission, each child should have its separate cot, placed out of the draft, but with a good wide breathing-space all around it, and the more a child is constitutionally disposed to ear trouble the more stringent should be the observance of these rules.—Youth's Companion.

Catalogues Received

John Dorsch & Sons, Milwaukee, Wis. Illustrated catalogue of ice plows and tools.

Hubach & Hathaway, Judsonia, Ark. Descriptive catalogue of new strawberries and apples.

T. S. Hubbard Company, Fredonia, N. Y. Descriptive catalogue of grape-vines and small-fruit plants.

Thomas Meehan & Sons, Germantown, Philadelphia, Pa. Illustrated catalogue of extra-choice hardy trees and plants.

The George Ertel Company, Quincy, Ill. Illustrated catalogue of incubators, brooders and poultry-keepers' supplies.

National Pitless Scale Company, Kansas City, Mo. Illustrated circular of pitless, steel-frame wagon and stock scales.

The DeLaval Separator Company, 74 Cortlandt Street, New York. Pamphlet, "Testing and Selecting a Cream-Separator."

The Williams Electric Telephone Company, Cleveland, Ohio. Illustrated catalogue of a full line of rural-telephone supplies.

The German Kali Works, 93 Nassau Street, New York. "Principles of Profitable Farming"—illustrated booklet on the use of fertilizers.

De Loach Mill Manufacturing Company, Atlanta, Ga. Illustrated catalogue of the De Loach sawmills and high-grade mill-machinery.

Oregon Information Bureau, Portland, Oreg. "Oregon, Washington, Idaho, and Their Resources"—illustrated pamphlet of information about the Far Northwest.

Keystone Fence Company, Peoria, Ill. Handsome pamphlet on the manufacturing investment proposition of the Keystone Fence Company, offering stock for sale.

Stark Brothers' Nurseries and Orchards Company, Louisiana, Mo. "World's Fair Fruits"—a handsomely illustrated catalogue; twenty-two full pages of fruits in colors.

The American Seeding-Machine Company, Springfield, Ohio. Free "Almanac for 1904." Full of useful information, illustrated in colors, and descriptive of a full line of seeding-machines.

$100.00 for a Name

We will Give $100.00 in Cash to the person who suggests the most appropriate name for our beautiful new picture, illustrated on this page. Any one ordering one of the pictures, together with a subscription to the Farm and Fireside, will be allowed to suggest one name.

We have referred to this picture heretofore as "The Chrysanthemum Girl," but we have decided that the picture deserves a better name, and we will pay $100.00 for it. Can you win the $100.00? See offers below.

$25.00 Extra for Quick Work

If the name the committee adopts is sent during this month (January), we will pay the person suggesting the name $25.00 additional to the above $100.00.

Reduced Illustration — Size, 20 by 30 Inches

Our New Prize Picture

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. It is fresh from the artist's brush, and never before offered to the public, so that the FARM AND FIRESIDE readers have the first opportunity to secure a copy.

The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. Order as No. 54.

A LARGE GOLD FRAME

If you will notice the illustration you will see that the artist has displayed more than the usual amount of genius. He has painted a wide gilt border, in exact imitation of a gold frame, so that *a frame is not needed.* It has the full appearance of a handsome gold frame three inches in width. All that is necessary is to fasten the four corners to the wall with pins, and it will have the full effect of a magnificent picture in a heavy gold frame. It is quite proper at the present time to hang works of art without frames. However, this picture can be framed if you so desire.

SIZE

The size of this magnificent new work of art is about 20 by 30 inches, which makes a large and elegant wall-decoration. The cut on this page is greatly reduced in size.

TEN COLORS

The colors and tints, the lights and shadows that the artist uses in his make-up of this work of art create one of the most striking and exquisite pictures of its kind that we have ever seen. The artist has employed no less than ten of the most delicate and beautiful colors and gold in his creation of this charming work of art. **This picture is actually worth $1.00.**

THE SUBJECT

of this exquisite painting is that of a beautiful young woman wearing a gorgeous heavy lace-over-silk dress, making one of the prettiest and most expensive gowns ever produced. In her hair she wears a diamond crescent, and about her neck a costly pearl-and-diamond necklace. She is standing among beautiful chrysanthemums, which tend to produce a most delicate and pleasing effect. Altogether it is one of the most beautiful paintings of its kind ever produced, and we are sure that all who receive it will be more than pleased with it.

AN IMPARTIAL COMMITTEE will be appointed to choose from among the names that which they believe to be the most appropriate. The person suggesting the name which the committee adopts will receive $100.00 in cash.

The Contest Closes April 1, 1904

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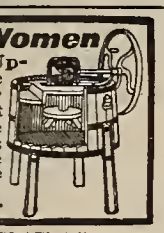

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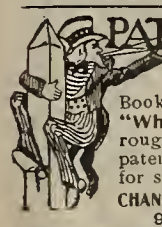

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The United States Pure-Food Law

THE pure-food law which went into effect July 1, 1903, has been brought to the attention of the customs officials by the Treasury Department, with instructions for its enforcement. Imports which are suspected of being adulterated or injurious to health are to be held up, and samples extracted and sent to the Bureau of Chemistry in the Department of Agriculture for analysis. The importer whose goods are challenged is to be notified of the fact, and is allowed to enter a defense of their quality within two days. If found to be adulterated, the goods can be exported or destroyed, according to the decision of the consignee.

Remarkable Operation by a Laywoman

Doctor Logan (M.D.), missionary in China, eight hundred miles distant in the interior from any other physician, was attacked by symptoms of appendicitis which in his judgment demanded an immediate operation, and he was in no condition to be moved. His wife, under his instruction, undertook the operation, and with his last directions of technic before lapsing into insensibility under the anesthetic which she had administered, proceeded to perform the operation. Such was their joint success that in a short time she was able to convey her patient, together with a young baby, by ox-cart and rail, the eight hundred miles to a medical station for professional after-treatment. The story seems fabulous, but it comes in a letter from the parties to friends in Illinois, and thence in a special to the New York "Times."

Value of Large Lung-Capacity

A perfect lung-capacity should be attained by using the lungs freely, forming a habit of breathing deeply, asleep or awake, inhaling to the full capacity of the lungs (minus the residual air) at stated periods, and at all times displacing in our respirations as large a quantity of air in our lungs as possible. The oxygen from the air, mingling chemically with the carbon of the blood, is not only the great purifier of the blood, but by its presence in the circulation is the natural stimulant to vital assimilation, as it flows through every portion of the system, prompting every tissue in the body to absorb from the blood the food it needs to give it life and strength. Very few people realize the immense advantage a large lung-capacity gives to those who have it.

The Overworked Brain

When an organ is overworked it soon gives out, and death is the penalty. It matters not what remedies are used, the result is the same. The heart of an athlete, the kidneys of a dipsomaniac, the liver of a "bon vivant," the brain of an editor, are examples of abused and overworked organs. Care and attention and medical skill are without doubt invaluable, but none of these factors produce good results. Of all organs, the brain is the most abused, because of our ignorance, want of prudence, and carelessness. Apoplexy, like a thief in the night, steals away our senses, and leaves a wreck behind. A notable and startling example was that of the late Secretary Windom, who fell in the midst of an unfinished sentence during a postprandial speech. Henry George died soon after an unusual mental strain in conducting a political campaign. Several clergymen have been stricken in like manner while occupying their pulpits. Another more recent example was that of the late Dr. I. N. Love, editor of the "Medical Mirror," who was stricken while making a speech on board ship returning from Europe just a few hours before landing in New York harbor.

These and other instances go to prove that apoplexy is a common accident with brain-workers, and that under certain circumstances the slightest cause often invites the fatal result. A plausible reason for these conditions is that the brains of such individuals are worked disproportionately, and show degenerative changes earlier than the other vital organs. This part of the anatomy lives faster and grows old more rapidly. The proof of a contrary proposition is that afforded by the ordinary laborer, who, unless a whisky-drinker, seldom dies of the brain-lesion in question. It has been truly said that "a person is as old as his arteries," and the vessels of an active brain are always the first to feel the influence of the extra wear and tear. Becoming hardened and brittle, an undue blood-pressure ruptures them, and the stroke is more or less complete, according to the region of the brain involved.—Medical Summary.

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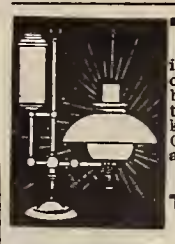

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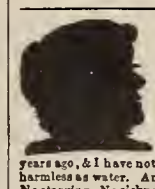

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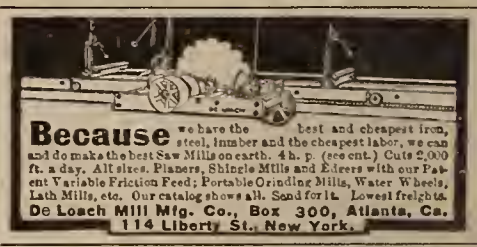

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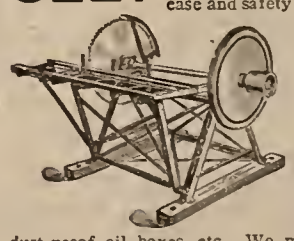

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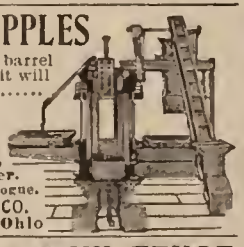

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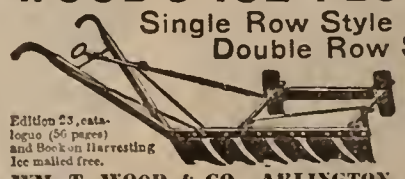

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FARM AND FIRESIDE.

Vol. XXVII. No. 8 EASTERN EDITION JANUARY 15, 1904 TERMS { 50 CENTS A YEAR 24 NUMBERS

"Money's Too Tight!"

By WALTER E. ANDREWS

Deacon Pepperton was nervous, his wife was "flustered," and all because a city cousin had come to spend a day or two with them—an event so unusual that the worthy couple felt weighted with the gravity of the situation.

"What'll I have for dinner?" queried Mrs. Pepperton, anxiously, when she got a chance to speak to her husband privately. "I can't seem to think o' nothing, I'm so upset."

The Deacon, in an endeavor to hide his own nervousness, looked very wise. "H'm! Why—er— Dinner? You said dinner, did you?" His wife nodded frantically. Whereat the Deacon puckered his brow into ponderous ridges, and desperately suggested "fried salt pork."

"No, no; that won't do," she protested. "We must have something nicer than that for Cousin Thomas. My! I wish we had a couple o' young chickens—ours are all tough old critters that ain't fit to put on the table."

A happy thought struck the Deacon. The ridges on his brow relaxed, and a smile of relief lit up his face. "I'll go over to Hank Peters an' buy a couple!" he exclaimed, grandly.

His wife, astonished at such unheard-of prodigality, sank into a chair, and gasped faintly.

"Yes, sir-ee, I will!" he repeated, stoutly. "This here occasion is something special. Hang the expense!" Grabbing his hat, he went out of the back door toward Hank's house.

"I want a couple o' them 'broilers' you raised in that there new-fangled machine o' yours," said he to Mr. Peters. And in a few minutes a silver dollar from the Deacon's pocket exchanged itself into two nice "broilers."

"Come pretty high, don't they?" hinted the Deacon, with a wry face. "You must have made a mint o' money off o' your machine this year!"

"Oh, I've done middlin' well," laughed Hank. "Raised three hundred or thereabouts. An' they're 'most all sold now."

"Three hundred! An' did you get half a dollar apiece for all of 'em?"

"Yes; half a dollar, or more."

The Deacon gasped, and thought dolefully of his own hen-yard at home. In it were twenty old hens that wouldn't sit when they ought to, and who would sit when they ought not to. He remembered, too, that he had once laughed at Hank because of "his foolishness in tryin' new-fangled hatchin' ways."

The dinner at the Peppertons' that day was a grand success. Cousin Thomas praised the fried chicken, and raved about the "luxury of having such toothsome dainties growing on one's own farm." "That's where you farmers have the advantage of us city fellows," he added, genially. "Now, if we want a tender young fowl, we must go down in our pockets for the price—and even then we often find it difficult to get exactly what we want."

"Have another piece," stammered the Deacon, avoiding his wife's eyes.

"But," replied Cousin Thomas, as he passed his plate, "there are some things about farm life that we do better in town. Take the average farm-yard, for instance. The grass isn't cut; there are no walks worthy of the name; the porch is a dismal failure; the trees are too few or too many; the vines and shrubs are missing entirely, or else they are uncared for or in the wrong places; the flower-beds (if there are any) look sick, and altogether there's a lack of that dainty, cozy, artistic yard-effect which is so commonly seen in town yards. I don't mean your yard, of course, for you have things slicked up into decent shape. I mean the average yard all over the country. I travel a good deal, and I know that a really artistic farm-yard is a rarity."

The Deacon coughed, and Mrs. Pepperton unconsciously looked out of the window toward Hank Peters' house.

"I can show you one yard near here, Cousin Thomas, that's as pretty as anything you ever see anywhere."

"That so?" The tone was politely skeptical. "I'd like very much to see it, Deacon."

After dinner he did see it, while Mr. Peters bashfully "stood around," first on one leg, and then on the other, in modest confusion.

"'Tain't nothing to brag on," said Hank when the city man lavished words of praise on the graveled walks, the neatly kept shrubs and vines, the velvety lawn and the well-placed trees. "I've jest fussed away with it at odd times, that's all. 'Tain't cost me nothing worth mentionin'. Anybody could have done it if they'd really tried."

"That beats me!" ejaculated Cousin Thomas, when a little later he sat sunning himself on the Deacon's porch. "I wouldn't have believed that a simple little country cottage and yard could be made so beautiful. Where did this farmer get his taste and his ideas?"

"I dunno," replied the Deacon, helplessly. "Hank always was the durndest feller you ever see for doin' things."

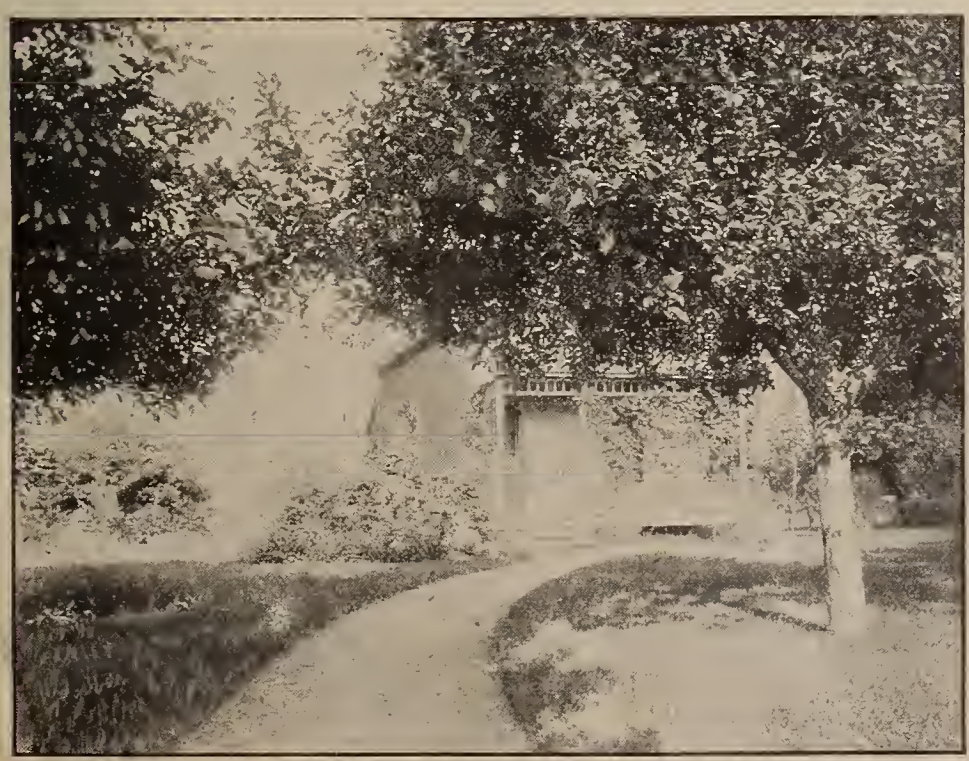
"But he must get ideas somewhere," persisted the questioner. "Isn't he a great reader?"

"Ye-es, I s'pose that's what you'd call it. Leastways, he spends more money on books, magazines an' papers than he ought to. I ain't got no money to waste on sech truck myself. Money's too tight."

"Is it?" said Cousin Thomas, quietly.

There was a subtle something in the visitor's voice that somehow made Deacon Pepperton feel uncomfortable. He looked quickly at the city man's face. It was as placidly genial as ever. So, dismissing his suspicions, the good Deacon changed the subject, and launched forth into a talk about the "hardships and disadvantages of a farmer's life."

GRAVELED WALKS AND NEATLY KEPT VINES



VELVETY LAWN AND WELL-PLACED TREES

Being Right

I once attended a state convention at which there was quite an active canvass and struggle on the part of a number of men for a certain nomination. The evening before the actual meeting of the convention hundreds of delegates and visitors crowded the rooms and halls of the hotels, and numerous friendly arguments were held between rival factions in their efforts to establish the superiority of one candidate over another. In these controversies there was as a rule much more noise than argument, for when a speaker ran short of logic he pieced out with loudness.

I was standing near a group of enthusiastic delegates, and had my attention attracted by a very ingenious argument one speaker was making. As he finished speaking, an earnest young man elbowed into the little group and assailed the arguments of the other, presenting the claims of his candidate so clearly, so concisely, and withal with such a perfect self-possession and beautifully trained voice and manner, that he commanded the attention of all within the sound of his voice. He spoke so honestly and sincerely that he won my admiration, notwithstanding he spoke in opposition to my candidate.

As he finished speaking, and was retiring from the group, I touched his arm, and said to him, "Young man, you say it very well, if you do say it wrong."

Quick as a flash he resented, and turning to me, exclaimed, earnestly, "I do not say it wrong, or I could not say it well!"

Then he went his way in the crowd, and I mine; but I have thought what a truth for every-day application there was in his answer. W. F. McSparran.

Current Notes

Kingsland Smith, a well-known flour-expert, says, "Flour in the Orient is not used for bread, but is made into macaroni or sweet cakes, or boiled in oil, making a sort of dumpling."

The annual production of glucose in the United States is said to be about one million tons. It is mainly manufactured from corn, and is becoming the principal source of the syrup-supply. * * *

FARM AND FIRESIDE

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Mr. Greiner Says:

TO INCREASE BIRD LIFE.—From New England comes the report of a great scarcity of song-birds the past summer. We had plenty of them here, and would gladly have parted with a share of them for the benefit of our Eastern friends. From my own experience with birds I would consider the following a good way to increase bird life: Plant more cherries, more mulberries, more June-berries, more small fruits generally, and provide bird-retreats by starting hedges and clusters of evergreens, shrubbery of all sorts, etc. We have done that here, and have achieved wonderful results in that line. The bird tribe has multiplied until they have become about as thick as the cherries on the trees in early summer. And then, when we would like to get some cherries for ourselves, we are told by editorial writers who possess more imagination than practical experience to plant more cherries. Plant more cherries to feed the birds, so that we may have more birds to plant cherries for. To us it looks like an endless chain. If our friends in the East are anxious to have more birds, the advice that they should plant more cherries is good.

BASIC-SLAG MEAL.—A number of times during the last dozen years I have bought and used a phosphatic manure offered by a Philadelphia party (who seems to have a monopoly on this product) under the name of "odorless phosphate." This manure is known as "basic-slag meal" and "Thomas slag." The Rhode Island Agricultural Experiment Station says that it is "an illustration of a phosphate which contains practically no soluble phosphoric acid, and yet is essentially as efficient as soluble phosphoric acid, at least upon the granite soils of Rhode Island. In a trial extending over several years it has given splendid results upon all kinds of crops, both immediately upon application and in later years. It is a waste product obtained in the manufacture of steel from iron phosphate, and is widely employed in Europe with most excellent results. It is but little known in the United States as yet, and is not found in the ready-mixed commercial fertilizers, owing to the fact that the extra lime which it contains would be likely to liberate some of the ammonia of the usual fertilizers if they were to become moist. It can be mixed with nitrate of soda and with muriate or sulphate of potash without fear of loss, thus producing a complete and most efficient manure. It is an ideal source of phosphoric acid for the sandy and acid soils of the state. The basic-slag meal contains from sixteen to twenty per cent of phosphoric acid." The only fault I have to find with this fertilizer is its price. It is much cheaper in Europe, but if imported—it being classed as "iron ore," not as it should be, as manure—a tariff tax of one dollar a ton is levied upon it, which hardly seems fair to the American farmer. The Rhode Island Station concludes that "the organized farmers of the country should see that this piece of injustice is righted."

BEES AND FRUIT.—A fruit-grower is said to have stated that he has been a bee-keeper as well as fruit-grower for many years, and can positively say that where bees abound fruit is more plentiful. I am a friend of the domestic bees, but more because I like their honey than because I consider them indispensable in our orchards and fruit-patches. It is generally conceded, I believe, that bees play a very important rôle in the economy of nature, and render us good service in the cross-fertilization of our fruit-trees; yet if any one will watch a cherry or plum tree in full bloom on a warm and pleasant spring day, he will in most cases find ten or more wild bees and bee-like insects to one domestic bee visiting the blossoms. It is only when our big pear and apple orchards seem to make the whole country a mass of bloom that the number of all such insects seems insignificantly small compared with the countless millions of blossoms, and that the presence of a good lot of stands of bees in an orchard will or can be expected to give decided results. For all of that, I like to keep my few colonies of bees just the same, and as usual I have a nice supply of the choicest white and alsike clover honey, made by my few stands of common black bees, still on hand, and after having had honey on the table almost every day for several months past, I still enjoy it hugely. Surely I would not be a fruit-grower without having some bees on the place.

BOTTLED GRAPE-JUICE.—I have a lot of grape-juice in bottles in the cellar. The grapes were carefully picked over, then mashed, heated with a little water, and finally put into a jelly-bag to drain. A little sugar was added to the juice, and the latter again boiled for a while. While still hot it was strained, filled into such bottles as I happened to have on hand, and tightly corked. This juice has kept nicely, and is just delicious; indeed, fully equal to the unfermented grape-juice for which we pay five or ten cents a glass at the stands, or forty-five or fifty cents a quart bottle at the grocers'. It is neither difficult to make nor expensive, and I have concluded that the best way to dispose of my surplus grapes after this (when I have more than the family and near friends will want) is to use them all for bottled grape-juice. This is both food and drink, and, I believe, the health-drink "par excellence." What I would like to know, however, is the truth in regard to its alleged germ-killing power. The Chicago Board of Health, according to a recently published report, has found in experiments with various fruit-juices that the bacilli of both typhoid and cholera were quickly killed by adding a portion of bottled grape-juice to the water which contained them, yet that the freshly extracted juice of the grape prepared in the laboratory had no effect on them. Now, I wonder whether the germicidal action of the bottled stuff was due to some germicidal preservative, like salicylic acid, or to some ferment developed after the bottling, and whether our home-made grape-juice has any such power or not. What I do know, however, is that a more gratifying, satisfying potion cannot be held to fever-parched lips than a glass of this unfermented grape-juice; that it was safe to give in alternation with milk in the several and all typhoid-fever cases where we had it tested, and that the patients take to it as readily as does the baby to the breast.

WOOD-ASHES AS FERTILIZER.—S. I. M., a reader in Texas, writes that he has about five thousand pounds of dry, unleached wood-ashes, and can get more without much expense. He can use them on two acres of white potatoes, six acres of corn and eight acres of cotton. The land for potatoes has made one hundred and forty bushels to the acre without fertilizers, and is a sandy hickory land. How much of the ashes to apply to the acre, and when, is the question. Dry, unleached wood-ashes is a most excellent fertilizer, as has been stated a good many times before. Some samples contain as much as seven or eight per cent of potash, which is in the best possible form—that of a carbonate—and readily available for use by plants; but it is a somewhat one-sided manure, as it contains but a small amount—possibly from one and one half to two per cent—of phosphoric acid, and no nitrogen. The deficiency of the mineral element, however, is easily cured by the addition of plain superphosphate. If he will spend about twenty-five or thirty dollars for dissolved South Carolina rock to go with his five thousand pounds of ashes, and get all the other ashes that can be had so easily, he will be in shape to give to his potato and corn land a pretty effective dressing, provided his sandy soil holds a fair portion of nitrogen and humus already. Much more of the combination may possibly be used with profit, and if I could get the ashes with little trouble and expense I would use one or more tons of them to the acre anyway, whether I intended to use the superphosphate or not. In most cases wood-ashes show good, often striking, results; but we may well be careful how we use them on potatoes. In many cases the free use of wood-ashes, especially in the drills, has made the potatoes scabby. If you apply the wood-ashes broadcast before planting, I believe a ton, or even two tons, to the acre could be put on safely, and give good results. The application may be made almost at any time. I still follow my old practice of hauling the manure to the fields during winter about as fast as it is made, and I would not hesitate to apply the ashes during winter or early spring, or at any other time. The potash of the ashes is not liable to be lost out of the soil.

Mr. Grundy Says:

LABOR PROBLEMS.—Corn-husking is about done, and the winter is fairly on, and hundreds of the men who have been so independent about whether they would work or not are now out of a job. In a few weeks they will be asking for work of any kind to earn bread. Whenever there is a great demand for help, a majority of "working-men" seem to care very little about hiring to anybody. They love to congregate together in town, and tell how many farmers have tried to hire them, and how they stuck for twenty-five cents a day more than was offered. When the rush is over, they are ready to take any old short job at reasonable wages.

Not long ago a man who lives "from hand to mouth" in town asked me if I had anything for him to do. He said that times seemed to be getting a little tight, and it was hard to get work of any kind. He has a sort of a team and an old wagon, and tries to get hauling to do. I asked him if there were not quite a number of people who wanted cobs from the elevators, coal and little jags of lumber hauled. He said there were some, but the regular draymen got about all such jobs. I asked what is the "regular" price they charge for delivering a load of cobs. He said thirty-five cents, and one and one half cents a bushel for delivering coal. I asked him if he charged the same, and he said he did. I asked him if he couldn't deliver cobs for twenty-five cents and coal for one cent. He thought he could, but that would be cutting rates, and he didn't want to do that. He said he ought to have what the rest got. I asked him if he did not think he could secure almost all of the coal and cob delivering in town if he would go around and offer to do it at a reasonable rate—one cent for coal and twenty-five cents for cobs. He said, "Yes, I think I could; but the draymen are friends of mine, and it would make them mad, and I don't want to do anything that would git them down on me." He admitted that they had no work to offer him, nor any favors to show him, but he did not like to cut their rates because it might lead to cutting in other lines, and he would be blamed for it. I had nothing for him to do, but suggested that if he were so hard up as he professed to be he had better cut loose from all combinations and imitation or amateur unions, and strike out for himself, and make a living by giving other people the opportunity to save a small portion of their earnings. He bristled up, and declared that he wouldn't cut either rates or wages if he never got a job. The following day I saw him sitting in a store toasting his shins by the stove, and waiting for a job to come along. I happened to overhear him tell a sympathizing friend that the world owed him a living and he is entitled to it. A little German who was warming his hands at the stove said, "I guess de vorld dond owe no man no leefin if he don'd earn it!" The "working-man" remarked that no man could earn a living unless he had a chance. Whereupon the little German snapped out, "Dere ish blenty of shances if a man has a mind to hund 'em up!" That closed the discussion.

PARCELS POST.—While in a neighboring town a few days ago I saw a man going the round of the stores with a petition against the parcels post, which every civilized nation on the globe except ours has had for years. His argument was that a "parcels post" would give the great department stores in the cities an advantage they should not be allowed to have. He said that people would find that they could obtain a large number of articles from the department stores much cheaper than they could in the village stores, and if they could get them through the mails they would buy them there and leave the storekeepers "in the soup." It is needless to say that he had no difficulty in securing the signatures of every merchant and every one of the merchants' employees. He said that an effort is to be made in the coming Congress to have an act passed establishing a parcels-post system in this country, and that a systematic canvass of all classes who would be likely to oppose such an innovation was being made all over the country to squelch it. The leading "interest" opposing it is the express companies, and their close second and chief ally is the village merchant. The express companies are determined to hold the business of transporting goods and declaring dividends on their stock as long as it can possibly be done, while the village merchant is determined to compel farmers and villagers to buy their goods from him at whatever price he may see fit to put upon them. When any interest or class determines to stop the wheels of progress, it may succeed for a time, but eventually that class will be run over and destroyed. Intelligent observers who come from Europe, where the parcels post has been established for many years, express great surprise that the people of this great, progressive nation should deny themselves this convenience. When told what interests stand in the way, they are still more surprised. As one said, "I always had an idea that America was much in advance of European nations in everything that makes for the good of the general people, but I find that in some things you are very far behind. And I find in many cases that a single interest or class can bar progress even more effectually than any ruler in Europe can. I think you are becoming bound to interests and classes closer and tighter than any people in Europe are bound to their ruler." Which reminds me that we used to boast a great deal about our independence, our spirit of progress, and freedom from tyranny in any form. Looking about me, and seeing the interests and classes working every imaginable scheme to compel other interests and classes to pay them almost double tribute, I wonder whether our spirit of liberty is not becoming a spirit of tyranny. If such really is the case, it will not last very long. People soon become restive under tyranny in any form, and will have none of it. There will be no great upheaval, no storm of revolution, but a gentle and overwhelming shower of ballots will bring about the reforms needed. There are people who are still grumbling mightily about the free delivery of rural mail. They contend that it has injured the business of the villages and small towns, and eventually will destroy it. They merely comprise the mud that clings to the wheels of progress, and are unable to do any harm. Every farmer who has had the benefit of free delivery for a few months is emphatic in its praise. It will remain despite the croaks of the disgruntled, and will be improved as the years go by, and eventually the parcels post will be added to it; and then the farmer will have almost all the advantages of living in the city, with the freedom, the pure air and water and the quiet and rest of the country. I would earnestly advise every farmer to write his congressman, and ask him to support the parcels-post system. The establishment of this great convenience would puncture the express octopus in a way that would benefit almost all of the people. They claim that they are now carrying merchandise at rates as low as is consistent with good business management (the payment of large dividends), yet we would see them meet the parcels-post rate as promptly as they did the money-order rate.

All Over the Farm

Farm Theory and Practice

SPRAYING TO KILL WEEDS.—Some of our worst weeds have a tender foliage, while the meadow-grasses and cereals have more hardiness, in respect to injury from spraying-materials. Advantage is being taken of this fact to destroy these weeds by spraying. Wild mustard is one of the very bad weeds in portions of New York, and the Cornell station has made some interesting experiments with the copper-sulphate solution. Prof. J. L. Stone reports that a two-per-cent solution killed the mustard in alfalfa, clover, oats and peas, and barley, and did not injure the crop. A two-per-cent solution means two pounds of the blue vitriol in one hundred pounds of water, or about eight pounds to fifty gallons of water. A three-per-cent solution, or twelve pounds to fifty gallons of water, injured no crops except alfalfa, and it quickly recovered. Some other crops are more tender than the cereals and clovers. Beans is one of these, being injured by the two-per-cent solution. Potatoes, also, are tender. The solution, of course, kills the weeds more quickly in bright, clear weather than in cloudy weather, and likewise a given strength is more likely to harm crops when the weather is bright.

Another pest that can be killed, it would seem, by spraying is dodder in alfalfa. This parasitic plant is becoming a serious nuisance. I do not know how extensively we may hope to see such weeds destroyed by spraying, but this means of fighting wild mustard has been adopted by some practical men with satisfactory results. Stronger solutions are used by many in destroying weeds where there are no crops, and no better means can be found for cleaning walks, driveways, etc.

For killing the roots and seeds of grasses in the ground, as is desirable in the case of driveways, one pound of the blue vitriol to two gallons of water gives a solution none too strong. In field-spraying to kill wild mustard in Canada peas, one Livingston County (New York) grower reports: "In 1903 I treated three hundred acres. I used ten pounds of copper sulphate to a barrel of water. The effect upon the mustard was seen very quickly. A one-horse machine having an eighty-gallon tank, brass fittings, and spreading eighteen feet, will cover twenty acres a day."

NEW AND OLD SEEDS.—While some seeds become nearly worthless when carried over one year, other varieties are not injured appreciably. The results of one series of eleven years of seed-testing indicate that red clover has a high percentage of vitality when new, and retains its vitality well. In the second year the seed was about as good as it was in its first year, and the loss in vitality the third year was not great. After that it began to lose more rapidly, though a few seeds germinated when eleven years old. Timothy retains its vitality equally well. Orchard-grass has much seed that is worthless when new, but that which is good retains its vitality well. The percentage of blue-grass seed that is good when new is often quite small, and the seed loses rapidly with age. Alfalfa remains good for several years, though losing slightly each year.

ALFALFA EAST OF THE MISSISSIPPI. — Professor Stone of Cornell says that experience has greatly extended the area that is now known to be adapted to alfalfa in the East. Persistently wet soils are unfavorable, and a porous subsoil is desirable, but even hard-pan land can be made to produce alfalfa by skilful management. Many failures have been due to lack of the right kind of bacteria in the soil, and inoculation is a practical help. Soil from an old alfalfa-field is a good means of securing the organisms needed. Usually some bacteria are gotten with the seed, and a second attempt to get a stand of plants in a field is often a success because scattering plants in the first attempt have supplied the soil with some of the nitrogen-gathering organisms. Liming the land favors alfalfa, and limestone soils with porous subsoil are excellent for this crop.

Thorough fitting of the soil is desirable. Indeed, it should be begun a year or two before the seeding if the land contains many weed-seeds. Early seeding in the spring is safest, and fall plowing is advisable where heavy freezing will improve the physical condition of the soil. Cultivate the land in the spring to fine it and to hold moisture, sowing the seed when the danger of frost is past. From twenty to thirty pounds of seed to the acre should be used. It is important that the young plants be clipped with the mower several times during the first season, letting the clippings lie as a mulch on the surface.

Alfalfa makes good silage, especially when mixed with corn in the silo, and Professor Stone advises the use of the last crop of the season in this way. It is hard to cure for hay in the cool weather of the fall, and when put into the silo it helps to balance the ration for cows.

FROST-LOCKED SOILS.—The soil that is frozen or that is covered with snow has its fertility guarded as securely as fruit or vegetables in cold storage. In cold latitudes, where the growing-season is short, and plants must have fertility in full supply to push development, Nature is kind in that she saves the land from loss during the idle season of the year. The material in the soil that is in condition to feed plants is easily soluble in water, and can be carried away by washing rains. When frost locks it up, or when the water falls in the form of snow and lies upon the surface for months, the saving is an enormous item in practical farm operations. In warmer latitudes the long season and absence of severe cold favor farm work and farm crops, and there is the thought that farming further north presents difficulties and hardships; but this saving of soil-fertility by the frost during winter certainly equalizes opportunities for making money from land. The wastes where winters are open is enormous. The careful farmer saves himself from much of the loss by keeping living plant-roots in the land throughout the winter, but the total area of land poorly protected or entirely unprotected is immense, and the depletion of supplies of available fertility is beyond calculation. DAVID.

Hints on Housing and Handling Manure

There is some difference of opinion in regard to the amount of plant-food that is lost in the storage of manure instead of spreading it upon the land directly as made, but all authorities and reasonable tests show that but a relatively small per cent of fertility escapes by storage when it is housed away from the effects of storms, drying winds and the direct action of the sun.

It is certainly not practical for the majority of general farmers to spread manure direct from the stable during a considerable portion of the year. It is equally true that they cannot afford to have it thrown into a yard, to be weathered, scattered about and robbed of much of its value.

Housing manure need not be expensive nor occasion much additional labor if planned for intelligently. The building or shed should be entirely separate from the stable and fodder store-rooms, for obvious sanitary reasons. It should, however, be convenient to the stable, and if possible be on a somewhat lower level, to allow of a roomy barrow, tram-cart, or what is much to be preferred, a conveyor with overhead track for a wheel-carrying receptacle, on the plan of the horse-fork hay-carrier. Such an arrangement provided with a jerk-dumper and a track with a slightly down grade will almost convey the manure from the stable to the storage-house while you wait.

The building itself may be of quite cheap construction, the essentials being a tight roof and floor, with walls of sufficient strength to withstand a considerable side pressure. The ideal floor is a cement-finished one, with a slight incline toward one side, where a small cistern is constructed to catch any drainage of liquid. A wall of masonry several feet high, also cement-lined inside, will add much to its worth and durability.

In making such a storage where much stock is kept, it will be found very desirable to have the storage-house roomy and provided with doors at opposite sides, so that the team can be driven through, in this way securing protection for men and team while loading, and likewise affording storage for machinery where it is easy of access during the summer when not occupied with manure. If the building is tight on all sides it will be necessary to provide a roof ventilator, so that it will be possible for the moisture to escape.

THE HOME OF A PROSPEROUS SOUTH DAKOTA FARMER

A conveyor as above described can be made to dump in any part of the building, which is of much advantage in allowing the manure to be distributed, thus largely preventing overheating and too rapid decomposition. B. F. W. THORPE.

What is Good Farming?

As I understand the whole subject of farming, those who follow it with proper skill and industry grow good crops, and yet make the land more and more fertile. This might seem to be self-contradictory at first thought, but when we investigate we will see that it is not.

There are lands in Europe and other parts of the world that have been under culture for thousands of years that are now producing larger crops than ever before, and in this country there are some of those that were among the first cleared and put into crops that are yet productive. However, such examples are rare in America, owing to mismanagement of the soil on the farm. Every soil naturally contains elements of fertility in considerable amounts, and we have within our reach the means of artificially treating it so that its fertility may be maintained and all the while yield us profitable returns.

In the first place, we must till the soil thoroughly. No trifling or slack methods of plowing, harrowing, and otherwise stirring and fining it, will do. By this means alone we could grow twice as good crops as we do in many cases. Many who think they are good farmers are lacking in this respect.

Proper rotation of crops is also necessary. Many of our richest lands have been so reduced in productiveness by growing on them crop after crop of the same kind that they are almost unprofitable. In rotation, the clovers and other leguminous crops are very helpful; and even grass is a relief, for it allows the formation of roots in the soil, and more or less vegetable matter is left to decay, humus being thus added to the soil.

Then we must look to the matter of available fertility for the crops. We should put back into the soil as much as possible of that which we took from it. By feeding the grain and forage on the farm, and putting the larger part of their bulk and richness in the form of farm manures, we do our duty in this respect.

Having done these things, we must not forget the use of commercial plant-food, or fertilizers. Lime will often do considerable good, and where stiff clay predominates, or there is an excess of humus, an application of twenty-five bushels every three or four years will help greatly.

Potash is a very important element of every fertile soil. It is obtained most cheaply in the form of either muriate or sulphate of potash, each of which contains a little over fifty per cent of available potash. At least one hundred pounds to the acre of one of these materials should be applied to the soil each year where there is need of plant-food.

Phosphoric acid is also one of the chief elements of fertility, and is one of the first to become wanting in the soil in available forms. The various preparations of animal-bone and phosphate rock are all rich in it. Of the former there is nothing better than finely ground bone-dust and dissolved bone. Of the dissolved phosphate rock five hundred pounds to the acre is none too much.

If all these things are done, coupled with the general use of good practical sense and business judgment in buying and selling the raw materials needed on the farm and selling the products grown, farming should pay well, and the land improve rather than run down. H. E. VANDEMAN.

Notes and Comment

The American farmer can no longer be justly caricatured as the "slow coach." The farmer of to-day must think and act quickly. The car of progress does not stop at the way-stations on the main line.

The financial condition of the farmers in southern Nebraska, southwestern Kansas and in Oklahoma is shown by the fact that a little more than one half of the wheat crop of 1903 is still in the farmers' hands.

It is to the interest of the farmer to have as much flour made in this country as possible, as it will cheapen the cost of bran and all mill offals, and thus reduce the cost of production of milk, beef, mutton, pork, etc.

Prof. E. W. Ladd of the North Dakota Experiment Station is authority for the important statement that "Humus derived from wheat straw, wheat stubble or grains of any kind does not have the water holding and absorbing constituents as does the humus derived from red clover, vetches, brome-grass, etc. It follows, therefore, that the growing of red clover affords a better type of humus in the soil."

The President in his message to Congress cannot be too highly commended for his insistence on reserving the public lands for the actual use of farmers and homesteaders. Bills have already been introduced into the Senate and House of Representatives providing for the repeal of the Timber and the Stone Act, the Desert Land Act and the Commutation Clause of the Homestead Act, under which such great areas of government land are being absorbed—over twenty-two and one half million acres in the last fiscal year, an area equal to that of the entire state of Indiana. Small farms, not vast cattle and sheep ranges, are needed. Let us hope that Congress will stand by the President in the interest of the plain people. Small holdings constitute the only sure remedy for rural depopulation. The public lands should not be conveyed to speculators and land-grabbers, but should be held and sold on easy terms to the common people, upon which to build up American homes. All holdings of an agricultural character should be strictly reserved for home-builders. * * *

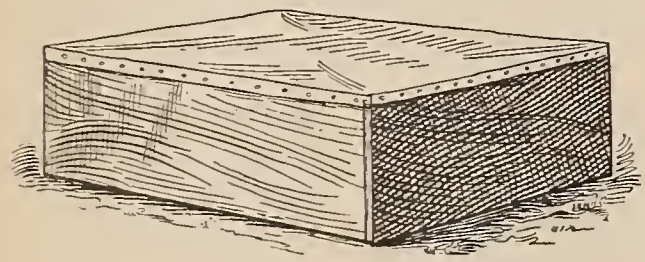
Gardening

By T. GREINER

THE WINTER MULCH.—The outlook is for a trying winter. The thermometer all December long has kept unusually low, going down at times to near the zero-mark, then skipping up again to above thirty-two degrees, and no snow on the ground, either. If such things as strawberries, onions wintered over for bunching in early spring, etc., ever needed winter protection, it seems they need it this year. Put on the mulch at once, if not already done. The ground is frozen, and we can drive anywhere over the beds except right into the onions. And by the way, the onions grown from seed last summer or fall look well enough yet. But it is the thawing that usually hurts more than the freezing. Let us keep them fairly well covered. Coarse marsh-hay is one of the best mulching materials. If this is not procurable, anything else will do, even corn-stalks where available if they are carefully spread between the onion rows, or better, perhaps, if they are first coarsely cut.

A NATURAL MULCH FOR STRAWBERRIES.—In early fall I had my new strawberry-bed as "clean as a whistle." Not a weed was to be seen on ground that is extremely fertile and natural to weeds, especially purslane. The latter is a plant which I do not fear much in the strawberry-patch, simply because it does not start up until after the fruiting-season. Then a new enemy came. Or is it a friend? I hardly know now, but will know later on. This is chickweed. It took complete possession of the ground, finally covering the rows of strawberries out of sight. The thought struck me to leave it as a winter mulch for the strawberry-plants. Chickweed usually thrives while the air is cool and moist. It cannot stand much heat. I expect that the winter snows will pack it down so that the strawberry-plants will be able to lift their foliage above it, and that the warm weather in May will give it the finish. This is my hope and reliance. Of course, if some help by man's hand is needed to subdue the chickweed in proper season, such help will be given. In the meantime, however, the strawberry-plants are apparently perfectly safe and secure under their cozy and snug blanket of chickweed, and I shall await the outcome with complacency.

TABLE-BEETS.—Last fall I had quite a demand for table-beets. People wanted a bushel or half a bushel to put in the cellar for use during the winter. Usually I have plenty of them, the remnants of the crop grown from seed sown in the regular way in July. This time I had only some left over from the earlier sowings, and of course the beets were rather large, and I fear not particularly tender. But people wanted them just the same, and when they were gone I had to pick out the small specimens from a lot of Yellow Tankards or Yellow Globes grown for feeding my cows during the winter. These small yellow mangels answer the purposes of a table-beet well enough when there are no better ones. They are not as tender and delicate and fine as the ordinary early table-beet in its prime,



BOX WITH MUSLIN TOP

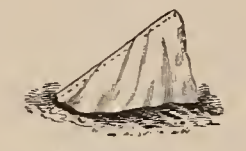
such as Eclipse, Market Gardener's, etc., and especially Crosby's Egyptian, which is really one of the finest of table-beets, and is a great deal different from and superior to the old flat Early Egyptian beet. The last-named variety remains in first-class condition for table use for only a very few days, while Crosby's Egyptian is good for weeks and months.

THE "NEW BEET CULTURE."—Speaking about beets, I will again say a word in favor of the plan of starting these roots for earliest sales and use early under glass, and transplanting to open ground in spring, just as soon as the weather and soil conditions will permit. In this way we can get beets fit for the table a week or so ahead of the crop grown from earliest outdoor sowing, and at this time they are usually in ready demand at high prices, comparatively speaking. Bunched beets sold very well here all last season, but never at the prices which we readily secured even at wholesale for the early transplanted lot. I believe there is good money in growing these first-early table-beets, and I shall gradually expand my operations again along these lines. This "new beet culture" promises to beat even the new onion culture in point of profit for these comparatively modest operations. I don't know what the outcome might be if beets were thus grown on a large scale. It would depend entirely on your market conditions. The transplanting plan will be well worth the trial, anyway.

PLANT-PROTECTORS.—A. F. S., a reader in East Newbern, Ill., asks about the patented bug-protectors which I mentioned in these columns some months ago. Undoubtedly they will be advertised again in due time, and the reader should look the advertising columns over carefully from time to time, in order to get information about such things, and the addresses of manufacturers. Anything manufactured and put on sale that is not worth advertising is not worth having. That much you may take for granted. If the manufacturer has not faith enough in a new patented device to put it before the public in a farm paper, how could he expect the farmer to have faith in it? Most of these protecting devices use cheap muslin or cheese-cloth or mosquito-netting for the main covering, and I know of nothing better. It might be advisable to give the cloth some waterproofing paint, although it is true I have never tried it, and perhaps it is not absolutely necessary; but it might serve to preserve the cloth in good condition for use during several seasons, and also give the sun-rays a better chance to pass through to the plants underneath. Yet cheese-cloth is cheap, anyway, and if properly used will repay its cost many times in a season. It is never too early in the season to think of these matters, and to plan and prepare for the requisites needed later on. We can now fix up a lot of home-made devices for protecting our vines from the next summer's crop of bugs and beetles, and have them on hand when needed. I will say, however, that last season I tried for the first time the new bug-poison "disparene," by keeping my vines well sprayed with it, and got rid of the bugs and beetles all right, although I would not swear that it would not have been possible for some other agent or circumstance to have accomplished that result in an equally satisfactory manner. However, I shall use this "disparene" again with lots of hope and expectation.

VARIOUS DEVICES.—Among the home-made devices for protecting plants—not only from bugs, etc., but also against any late night frost or against cold winds—is the simple box frame (a box without top or bottom, say a foot square and four to six inches high). A

SLANTING STICK



STICK WITH NETTING

square piece of the cloth or netting may be tacked over the top. In an earlier issue I mentioned a similar device made of stiff paper, with a piece of cheese-cloth sewed or pasted right over a square opening cut into the top, the sides being held down by pieces of wire bent in double-pin shape. For another device, a piece of netting may be tacked to two end boards, each end board being provided with a small sharpened stake (nailed on the outside), which when pushed into the ground will hold the end boards in place, with the cloth stretched tightly between them over the plants. Even a large piece of cloth or netting and a few sticks will do the business. We can take some pieces of willow twigs or other pliable wood, and stick a couple of them crosswise into the ground in the form of a bow over the hill of plants or a single plant, and place the piece of cloth over this frame, holding the edges down by banking a little soil up over them. Or we may simply push one or more little sticks slantingly into the ground and over the plant or plants, and cover with netting; or the netting may be simply placed directly over the plants in loose folds. Cheese-cloth may be considered preferable to ordinary mosquito-netting. The latter is rather coarse, and would not prove an effective barrier to thrips and other small insects that might do damage. All these devices are simple, and perhaps as effective as any more elaborate or more costly ones. Most of these devices I find mentioned in "The Report of the Department of Agriculture of the State of Pennsylvania for 1902." The board trap is still another, this being especially used for squash-bugs. Of this I will have more to say later on.

Grape-Growing in Western New York

Grapes are grown in western New York on a scale unheard of elsewhere in America, California only excepted. Southern Michigan and a small area of northern Ohio alone show viticulture on a comparable basis.

In Chautauqua County alone, on a strip of territory bordering on Lake Erie, and tempered by its climatic influence, there are from thirty-five thousand to forty thousand acres of bearing grape-vines. At many a four-corners in this belt a visitor may stand up in the seat of his buggy, and for a mile in either direction see solid, unbroken stretches of vineyard. Eight thousand car-loads—nearly one hundred thousand tons—of the purple fruit of the vine go annually into the markets from this veritable "Garden of America."

Vines—largely Concords—are planted here in wide rows, with vines from five to eight feet apart, averaging six hundred to the acre. Five large nurseries supply the home demand for vines and also fill large foreign orders. Ten per cent of the grapes are early or fancy varieties—Wordens, Moore's Early, Niagaras, Delawares, Catawbas, etc.—the others are Concords.

Post and wire take the place of the old-fashioned trellis. The support is usually two wires high, the first twenty-four inches from the ground and the second from forty-eight to sixty inches. Sometimes a third wire is added. Each winter vines are pruned back to from five to seven shoots, with from six to nine buds each, all the other of this year's growth, and all of last year's growth except the main trunk, being cut away each year. The shoots left are tied up to the upper wire before buds swell in the spring.

WILLOW TWIGS AND MUSLIN

Cultivation in the most profitable vineyards is intensive; plowing, cultivating, wing-plowing and hoeing follow each other at close intervals. Kainite compost, salt, plaster and cover crops—for example, crimson clover and cow-peas—are used to supply the necessary elements of fertility.

A vineyard in a good year yields three and one fourth tons to the acre, averaging for ten years past fifteen dollars a ton. This year the average was below two tons, but the price went as high as forty dollars a ton, averaging over thirty dollars. Vineyard land is worth from one hundred to two hundred and fifty dollars an acre.

A. M. LOOMIS.

Fruit-Growing

By S. B. GREEN

LOCUST-TREES.—F. S., Brule, N. D. The black locust and honey-locust are very different trees. Neither of these trees will be found very satisfactory in North Dakota, but the black locust is hardier than the honey-locust.

FERTILIZER FOR STRAWBERRIES.—T. F. K. Strawberries and watermelons are both gross feeders, and any fertilizer that would produce a good corn crop would be good for either of these crops. A question like this is one that cannot be answered in a short space, as so much depends upon the kind of soil. If by fertilizers you mean commercial fertilizers alone, I am inclined to think that you would get excellent results from an application of five hundred pounds of bone phosphate and one hundred and fifty pounds of high-grade muriate of potash.

CORNELIAN CHERRY.—P. & B., Mountain View, Hawaii. The Cornelian cherry has been grown in this country for many years, but I have never seen it sufficiently productive to warrant recommending it as a fruit-producing plant. The plants, too, have been quite liable to blight in some of our Northern plantings. I think it quite likely that there are some parts of this country where it might be grown to advantage; but it has been thoroughly tested here, and if it had any especially valuable qualities I am inclined to think that we should know of them. I am pleased to know, however, that you esteem the preserves from this fruit so very highly.

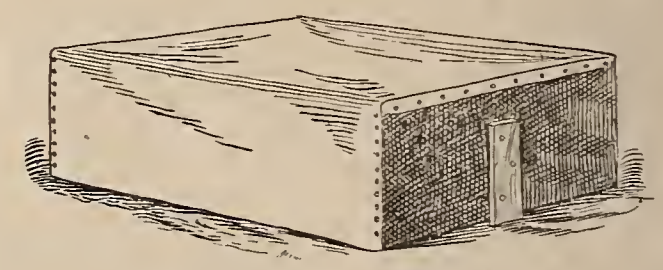
Lye for San Jose Scale

M. H. Willbong, of Illinois, states in a recent letter to the FARM AND FIRESIDE that he has succeeded in completely destroying the San Jose scale which infested several pear-trees, by applying with a brush a strong solution of concentrated lye, with which he washed the trees. The application was made in November and December, but it may be made any time before the buds start in the spring.

Fruit Marketing and Storage

Some of the most pressing and important questions relating to the fruit industry are those that grow out of the present tendency in horticulture to produce each fruit in that section where it can be grown best or to mature at a certain desired time, even though that locality be thousands of miles from the market where the product will be consumed. These problems may be characterized as those relating to marketing and storage. Their solution lies at the foundation of development of important export trade in fruits, and is hardly of less moment in connection with that portion of the crop which is used at home.

Some of the questions involved are with regard to the best methods of harvesting, grading, packing and transporting each fruit, with reference to accomplish-



MUSLIN COVER WITH END BOARDS

ing its safe and economical delivery at its desired destination; also with regard to the suitability of the variety, packing and package to the needs of the consumers, who are to be the purchasers if profitable trade is to be built up. These questions are of especial importance in connection with the export trade, and a series of experimental shipments is being made to obtain light upon these points.

Through these experiments, which have been conducted on a commercial scale, chiefly through the ordinary channels of trade, it has been demonstrated that the Bartlett pear, a choice but perishable fruit, of which there is frequently so large a surplus in our Eastern states as to depress prices to a point where the producer receives little return for his labor, can be successfully and profitably shipped in refrigeration across the Atlantic, and sold at prices that yield a good net advance over home value.

Elberta peaches from Georgia and Connecticut, and several varieties of summer apples from Delaware, can be landed in London in prime condition when the climatic conditions at the time of shipment are favorable; and they are likely to meet with good demand at fair prices.

It is gratifying to note that commercial shippers are following the work of the department along these lines with keen interest, and preparing to make extensive shipments of such fruits as are found capable of profitable handling in this way.

A notable event of the past year was the inauguration of direct shipments of American winter apples to Paris through the instrumentality of the department. As was anticipated from previous investigations made by the department, russet varieties were found to have preference to red apples in that market, and where sound and free from blemish were in good demand at high prices. The opportunity to develop trade in this line appears excellent.

The storage of fruits at low temperatures to retard their ripening and decay for a sufficient time to permit them to be handled to the mutual advantage of the grower, and the consumer has assumed large proportions in this country, chiefly within the past decade.—From 1903 Report of the Secretary of Agriculture.

The Grange

By MRS. MARY E. LEE

Ohio State Grange

THE thirty-first annual session of the Ohio State Grange, which convened in Mansfield, was one of the best in its history. No pains had been spared by Richland County Patrons to make the convention a happy and profitable one. They were generously supported by the citizens. The opera-house and Y. M. C. A. building were heated and lighted during the entire session. The music, under the leadership of J. P. Needham, was of a high order, and the stage-decorations were beautiful and appropriate. A free excursion to the Reformatory was extended by the citizens, and over six hundred availed themselves of this opportunity to visit one of Ohio's most useful institutions. Superintendent Leonard and his assistants are doing a splendid work with the boys whom our schools, churches, homes and other social institutions have failed to save from reckless living.

The public reception was unanimously conceded to be the best ever tendered the grange. W. S. Capeller, the genial president of the Board of Trade, and editor of the Mansfield "News," extended a cordial greeting. Hon. W. S. Kerr, and Superintendent Van Cleve of the public schools, followed with addresses of a high order. Secretary C. M. Freeman, Worthy Master F. A. Derthick, State Lecturer John Begg, and Hon. J. H. Brigham, Assistant Secretary of Agriculture, Washington, D. C., responded no less ably. These men, representing many diversified interests, found a common ground for the discussion of the social problems which affect us all. It was an exemplification of the truth that the interests of one are the interests of all—that each needs each. The music was excellent. The choir and orchestra of the Methodist Episcopal Church, Miss Robinson and Messrs. Maxwell and Marquis received many encores.

Worthy Master Derthick presided with such fairness and wisdom that his rulings were not once questioned. This is a splendid record in a body noted for its keen discussions and able debaters. The tolerant and generous nature of the worthy master communicated itself to the members, so that while some of the discussions were the warmest in years, a sting was never left. Mr. Derthick's rare power in preserving harmonious relations throughout won for him the admiration of all, and the Patrons felt that the right man was in the chair. Mr. Derthick's address was a clear, forcible and logical statement of the position of the grange on matters affecting agriculture. It was the sentiment of the deputies that the executive committee should print it for distribution.

The Patrons and citizens of Richland County covered themselves with glory.

Among the distinguished guests who contributed to the success of the meeting were: Col. J. H. Brigham, Assistant Secretary of Agriculture; F. P. Wolcott, editor "Grange Bulletin," and master of Kentucky State Grange; B. G. Leedy, master of Oregon State Grange, and Mrs. Leedy; Miss Harriet Mason, the accomplished associate editor of the "Ohio Farmer;" Judge Henry M. Huggins; Professor Thorne, director of the Ohio Experiment Station; Prof. C. G. Williams, Agricultural Experiment Station; Prof. Homer C. Price, dean of Ohio Agricultural College; R. O. Hinsdale, member of the Ohio State Board of Agriculture, and Dr. F. P. Ames.

Deputies' Meetings

The meetings of the Deputy Masters' Association were enthusiastic. Lecturer C. R. Betts had prepared an excellent program, which he carried out successfully. The sessions were really experience-meetings of the most helpful kind. Doctor Ames sounded the key-note when he said that a successful deputy must be wisely optimistic, and not easily discouraged. Judge Huggins made a forcible and convincing appeal for more attention to the purely social features of the meeting. "The great pursuit of mankind is happiness," said he, "and the grange should cater to that demand. People must be interested, or they will not attend." Judge Huggins has promised us a paper along this line. F. P. Wolcott made a splendid address, and a suitable resolution expressing the deputies' appreciation of his work for the cause was unanimously adopted. State Master Derthick, in a heart-to-heart talk with the deputies, expressed his appreciation of their loyal support, commended their enterprise and zeal, and extended sympathy for them in their work, which was hard and poorly paid. The sentiment among the deputies was that the state master was in close and sympathetic touch with them. He was accorded the most hearty commendation. State Lecturer Begg urged better organization and better work by the various granges.

The deputies justly feel that they have not received their just share of time at the State Grange. Their meetings have been sandwiched between the regular sessions; but despite the limited time, their meetings are always well attended and enthusiastic. This year they asked for Tuesday afternoon next year, and it was granted. The State Grange will not regret its action, for if the past is any indication of the future, there will be splendid addresses. Go into any gathering, and you will not find a brighter, more businesslike, alert group of workers than are the deputy masters of Ohio State Grange. Brother Jenks made an excellent presiding officer, while Brother Marshall, as secretary pro tem., kept tab on the proceedings.

A Touching Incident

At the Logan Farmers' Institute, Homer Wright, who has done more than any living man to create and build up institute work in Hocking County, was carried to the room in his invalid-chair. Mr. Green, of the "Sentinel," in a few touching words spoke of Mr. Wright's services, and asked that he might talk. Turning his sightless eyes to the crowd over which he had so often presided with ease and dignity, he spoke of the work of the past, and pleaded for the future. As he bade them "good-by," there was not a dry eye in the room. All recognized his services to agriculture, and with each there was keen pain that one who had done so much, and was yet in the prime of life, should be so stricken. Resolutions expressing appreciation of his work and sympathy for his affliction were heartily indorsed.

Mr. Wright is an object-lesson of a successful business farmer who has conserved the fine estate left him by his father, and added to it with his own skill. A college man, with the grace of foreign travel, he has been a potent factor in all that pertained to agricultural matters in our section. There is not a more popular presiding officer in the state, nor one who was more able to draw out the best there was in each. It was fitting that he should receive this splendid ovation from his friends and neighbors.

Mr. Wright knows the hopelessness of his condition. His eyesight is gone, and his hearing, the physicians say, will leave him suddenly. Yet he is calm, cheerful and patient. One feels the power of such a man, and the blessedness of having so lived that he can look with equanimity on a condition that would appall most of us. He has ever been a student of the best literature, and his mind is a storehouse of the best thought. Such a life is surely an incentive to all to live well, study, inquire, know, that when the cares of life press down upon one, they may be met with fortitude.

A Home for the Grange

Sentiment is crystallizing in favor of making Columbus the permanent meeting-place of the Ohio State Grange. It is a central point, easily reached from any point in the state, fifteen railroads running through it. It has ample hotel accommodations with a disposition to make reasonable rates. One can find board and lodging, paying as much or as little as he pleases. More people would attend, and it would become an annual outing for the many. The expense for a series of years would be about one half what it costs to carry it over the state. Our principal public institutions are located there. The farmers would have an opportunity they would much appreciate to come in contact with the College of Agriculture and Domestic Science. This alone would draw many of the most progressive farmers. Then there is the state library and the other libraries of the city, besides the attractions that are found in the capital of a state and in no other place.

Each year delegates and visitors complain of long waits at obscure stations. A late train may throw one behind many hours. Columbus, being a railway center, is therefore comparatively free from this annoyance. Then, the notion of permanency appeals to many. It was pointed out that so long as the state fair moved from point to point in its efforts to do missionary work in the sections visited, the results were small; but when it found a permanent location, the masterly genius of W. W. Miller made it the greatest exposition in the United States. More people annually visit the fair at Columbus than were reached in ten years in going over the state.

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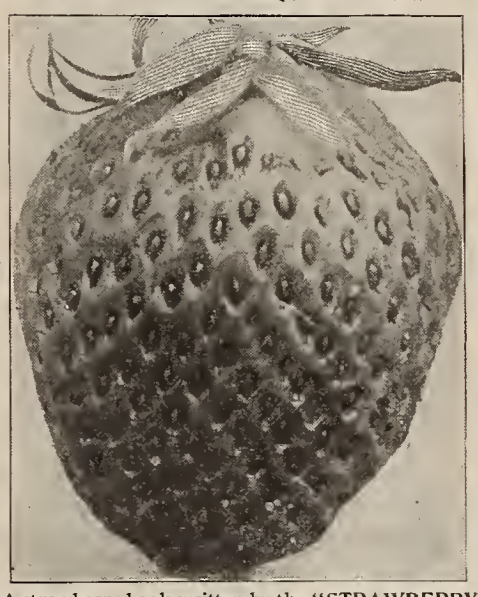

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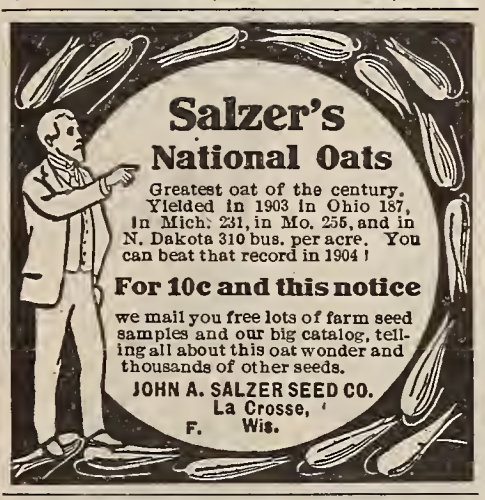
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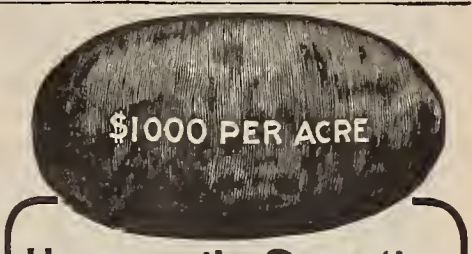

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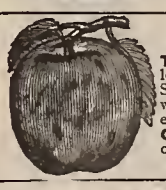
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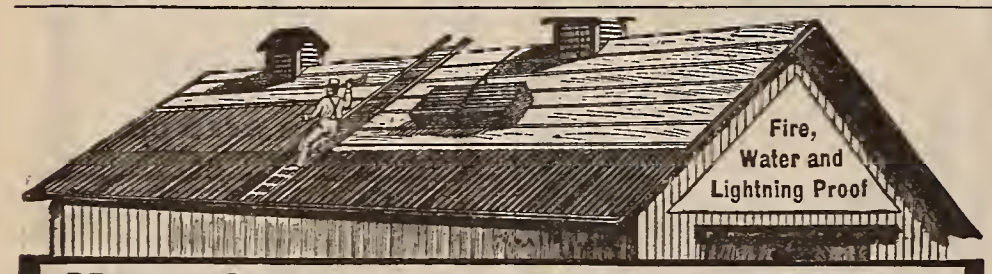

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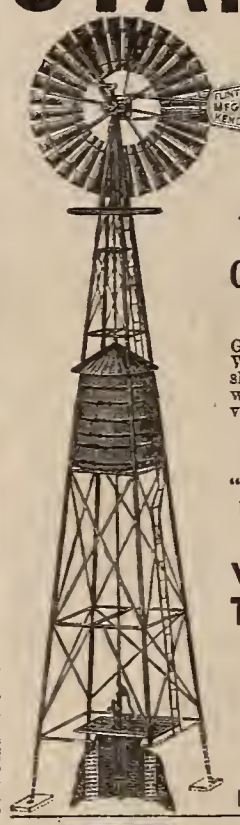

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PATENTS No attorney's fee until patent is allowed. Write for *Inventor's Guide.* FRANKLIN H. HOUGH, Atlantic Building, Washington, D. C.

Live Stock and Dairy

Getting the Calves Started Right

It is worth while to get the calves started right. Everything depends upon it. It is very hard work to take a little, pot-bellied, stunted calf, that never has had anything like a good time in all its life, and get it headed in the right direction. I have seen a good many such calves the past year, and it seems to me no one ever could take them and make anything of them in the line of a cow. I would rather spend half a dollar keeping the calf started in the right direction than five dollars to bring it back after it had once gotten down into the ditch.

The first thing to be decided is whether you want to raise the calf at all or not. Last spring I went to buy a Jersey calf. When I took the little thing, and carefully threw it on its back, the farmer wondered what in the world I was going to do. I explained that I wanted to see how many teats the calf had, and that if it had five I should like it better than if there were less, and in case I found six it would be still more desirable. The farmer said he never had heard of that before; but it is a pretty good indication that the calf has the making of a good cow about it. Then, too, know the parentage of the calf. Look at it all over, and see if it is a creature you think you will like to have when it gets to be a cow.

These points decided, take the calf away from the cow when it is not more than a day old, and fasten it where the mother will not mourn for it because she sees it. It is all right to let the calf have the first milk the cow gives. There is something about it which the calf seems to need in its stomach. Twelve hours after you take the calf from its dam, offer it some milk. The process of teaching a calf to drink used to be a pretty serious ordeal for me. I used to think one must force the calf to put its head down into the pail, and hold it there until it begins to drink. That is not a very sensible way, and I know it now.

My plan to-day is this: I take two or three quarts of milk in a pail, having it fresh and warm from the cow. Taking a stooping position in front of the calf, which is fastened by the neck with a strap and chain, I give it my fingers to suck. Those who have calf-feeders say they avoid sore fingers at this point. I never have used such a thing, and never suffered very seriously from bitten fingers. When the calf is working good at the fingers, I carefully lower my hand toward the milk in the pail, holding the pail up from the floor a little with the free hand. It is not natural for the calf to get its rations from the floor. Its natural tendency is to look up for the cow's udder.

If I succeed in getting the calf's head into the milk, I hold it there a minute until the calf gets to drinking. If I do not, and the calf gets its head away from me, I go over the process once more, and perhaps again a number of times. The need of patience at this point is obvious. We need to think that we are dealing with a creature that does not know so very much about the things of this world. Some of us were that way ourselves at one time. When I have succeeded in getting the calf to drink out of the pail, I slip my fingers out of its mouth, and wait for it to lift its head, which it will soon do; then I repeat the operation until it gets the idea firmly impressed upon it that its rations are down in the pail, and that there is only one way to get them.

When the calf is three weeks old, I shade the quantity of new milk given, adding in the place of it a little sweet skimmed milk and a taste of oil-meal. Only a bit of this can be given at the start—less than a teaspoonful—increasing the quantity as the calf can take it. This lessening of the new milk goes on until the calf is taking all skimmed milk. Now a crate of hay with a lock of bright hay in it may be put near the calf. This the calf will soon learn to work at, and it will do him good.

Now the calf is fairly started. If you wish him to grow up without horns, when he is less than three weeks old snip away the hair over the little knobs of horns, and wetting them with water, rub a stick of caustic potash over the bunches. Only once is necessary; but be thorough about it, and still do not unnecessarily burn the head. Look out for your own fingers. Caustic potash is hot stuff.

E. L. Vincent.

Clean Versus Foul Feeding

Stock-feeders in general do not attach sufficient importance to the need of clean feeding nor realize the important bearing that care or negligence in this matter exerts upon the thrift and well-being of the stock fed. Throughout the list of farm stock, from the naturally dainty and extremely particular feeding horse, whose scent is so keen that the least taint of foulness on hand or foot of the attendant is instantly detected and exhibited by sniff or snort, to the occupant of the sty, which has earned for himself, largely through compulsi the epithet "as dirty as a hog," all will well repay the additional effort needed for clean feeding.

The constant breathing and mucus exhaled and blown from the animals' nostrils into mangers and feed-boxes of necessity gets them badly befouled in time. This befouled condition in connection with refuse of grain and mill-feeds favors germ-development, and produces veritable hotbeds of microbes when the weather is warm, whose action gives rise to the putrid and especially obnoxious scents found around uncared-for mangers and other feeding-receptacles.

The writer has often entered stables where the scent of the putrefying matter could be detected as soon as the door was opened, the feed-boxes themselves being so obnoxious that no self-respecting animal would dream of eating from them until starved to it. When in that condition only a portion of the grain will ordinarily be eaten, the remainder being nosed out and smeared over the manger. Quite likely the animal will be considered off his feed, and the ration reduced until dire hunger compels him to clean up grain, filth and all. When such practice prevails, even in much less degree than in the cases cited, it is unreasonable to expect full returns for the rations fed, even if the animals do not contract disease.

It is no more than common humanity toward the animals under our charge to see that feed-boxes and mangers are thoroughly and regularly cleaned every few weeks, and especially in hot weather they should be treated to a searching friction with a good cleansing soap or preparation that will sweeten and disinfect from all taints and odors.

It is becoming more plain to intelligent feeders and experimenters that the food that is enjoyed by the animal while being consumed is of more utility, even if it contains less elements of nutrition, than some others that are distasteful. This same principle holds true with regard to well-relished food that has become fouled and unappetizing by reason of neglect or careless handling.

Even with pigs and poultry, which seem to care less than most animals if their feed is foul, it will be found profitable, to say nothing of higher motives, to take measures to prevent these grovelers in the mire from befouling their troughs and food-receptacles. Animals prevented from consuming poisonous filth with their food will have better digestion, better nutrition, and in consequence the carcasses, or product, if intended for food, will be better flavored and more wholesome in every respect.

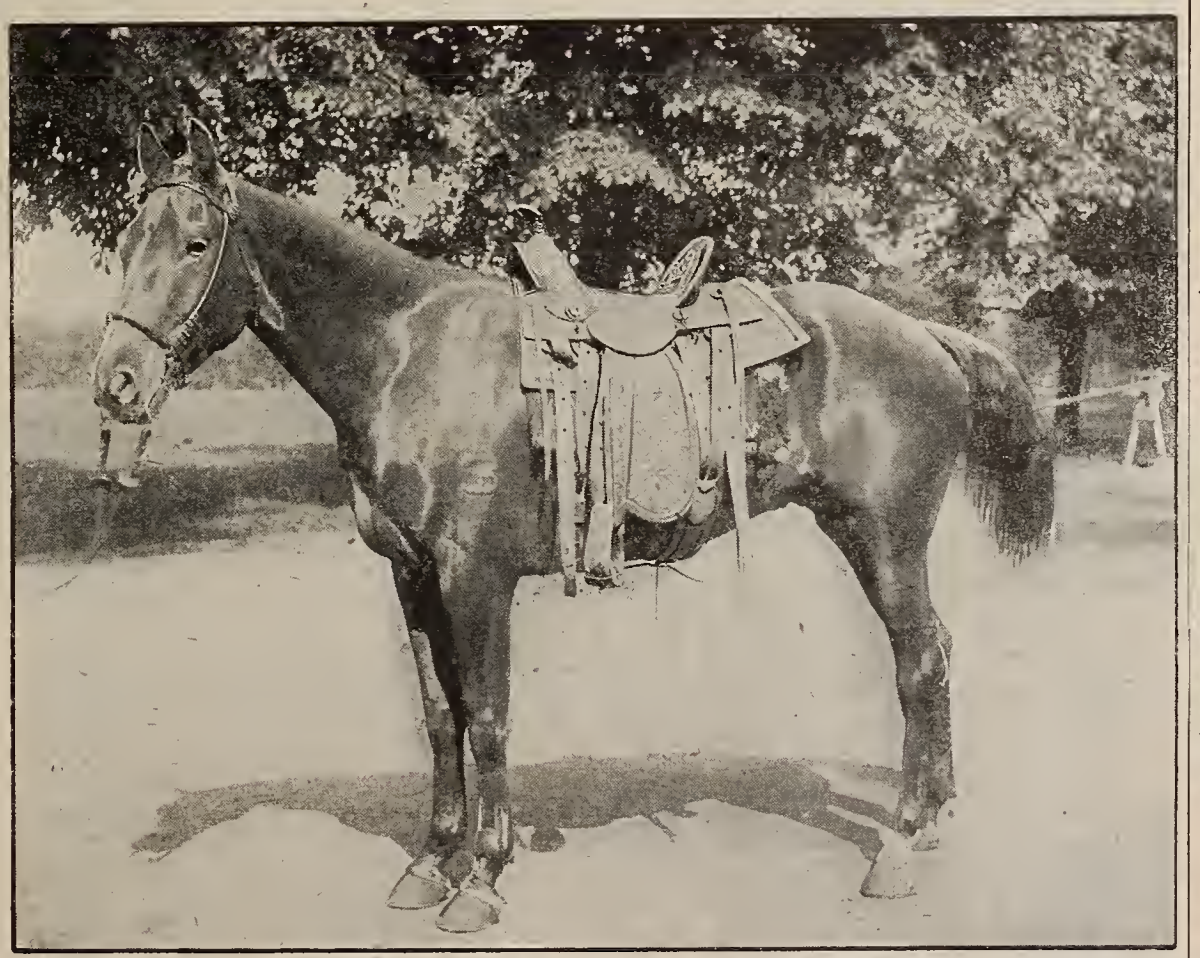
B. F. W. Thorpe.

Foot-and-Mouth Disease

In 1902, for the first time in eighteen years, foot-and-mouth disease was discovered in the United States. The manner in which the contagion was brought in is not definitely known, but it evidently came with some articles of merchandise, as it first appeared near the docks of the port of Boston, and spread from there toward the interior. When the existence of this disease was recognized and brought to the attention of the department, the contagion had already spread over the eastern part of the state of Massachusetts and into the states of Rhode Island, New Hampshire and Vermont. The whole country was menaced with the plague, and it was only by the adoption of radical measures and by the prompt, efficient and indefatigable work of the inspectors that the contagion was controlled and eradicated.

The plan of work was, briefly, to rigidly quarantine all infected premises and the animals upon them, to slaughter at the earliest practicable moment all susceptible animals on such premises, and to disinfect the stables, pens and utensils in a thorough manner. Operations were begun December 1, 1902, and the last diseased herd in this outbreak was slaughtered May 9, 1903. The coöperation of the executive departments of the several affected states was prompt and complete, and enabled the federal authorities to enforce regulations and stamp out the disease wherever it was found. The number of animals slaughtered on account of this disease was 4,461, of which 3,872 were cattle, 360 hogs and 229 sheep and goats. There was allowed by this department seventy per cent of the appraised valuation as indemnity. The total amount thus paid was $128,908.57. There were other expenses, such as for salaries, traveling, labor, disinfectants, etc., additional to this amount, but the total cost of the eradication of the disease was less than $300,000.

The stock-raisers of the country were saved from a great calamity by the successful termination of this work. It is the general history of the disease in other countries that where an outbreak assumes the proportions of the one which existed in New England last winter it spreads over the whole country, affecting practically all of the cattle and a large part of the sheep and hogs.—From 1903 Report of the Secretary of Agriculture.



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SPASM OF THE GLOTTIS

Frequent inquiries have been made concerning a disease in pigs characterized by spasms or fits. The attacks almost always occur in winter, when the weather is severe. Animal shows no symptoms when coming from the sleeping-pen until it attempts to take food, when it will be seized suddenly, will raise its nose and gasp for breath, soon fall over and struggle for a moment or two, when the seizures will abate, animal will get up and possibly appear all right.

Cause.—Occasionally the first attack will prove fatal, although this is not the rule. Attacks will recur every day, or it may happen every time the animal attempts to take cold food, especially swill. The attacks come on most frequently in pigs or hogs that have warm quarters, especially those that are allowed to burrow in manure-piles or straw that becomes heated. When they come into the cold air, sudden change induces attacks, especially when taking cold drink.

Treatment.—Treatment that has given the best results is to avoid the conditions that produce the difficulty. Hogs should not be housed in too warm sheds, especially if fed in a cold place. Do not give access to the manure-pile, where they will burrow into the heated, half-decomposed straw or become piled up and overheated.

It is also of great advantage to warm the feed, where this is practical, and anti-spasmodics should also be employed, such as from ten drops to half dram doses of fluid extract of hyoscyamus, according to size of animal; or ten to fifteen grains of bromide of potash should be given three times a day.

The rugged health that tonic doses of Dr. Hess Stock Food induces will give a hog the vital power necessary to resist these attacks. This wonderful reconstructive is the result of a lifetime of study and experiment by Dr. Hess (M.D., D.V.S.)—graduate of both medical and veterinary colleges—whose methods and works are recognized everywhere as authoritative.

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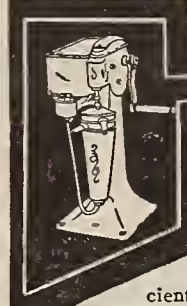

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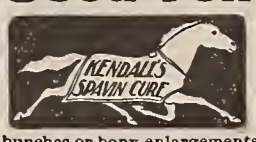

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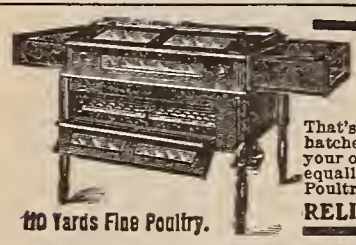

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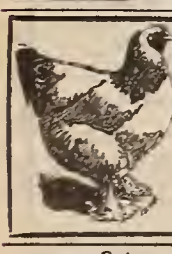

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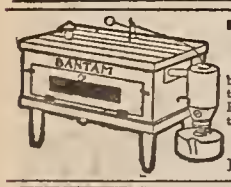

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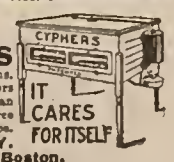

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Poultry-Raising

By P. H. JACOBS

The Early Chicks

INCUBATORS should now be in operation, and some of the hens will become broody in advance. While it means work to care for early chicks, it pays at this season, as high prices prevail. One fact often overlooked is that young chicks hatched in cold weather are really out of season—that is, they are not favored with spring weather. The brooder-house should be warm, whether hens or brooders are used. Loss occurs largely from overfeeding, lack of warmth and failure to keep up the temperature at night. Feed three times a day, never leaving food to remain over a single meal; but between meals a little millet-seed should be scattered in litter for them to seek by scratching, as they will thrive best when kept at work. For the first three days give pin-head oatmeal (allowing nothing the first thirty-six hours), and then feed, morning and night, bread made of equal parts (by weight) of corn-meal, middlings, sifted ground oats and animal-meal. Alternate this with the pin-head oatmeal, if preferred. After they are a month or six weeks old, feed anything they will eat. Keep the floors dry, provide gravel and water, avoid drafts of air, and never overlook the temperature of the brooder and quarters. More chicks can be raised under brooders than under hens, and no more labor is required than to attend to a couple of hens with six or seven chicks each. Better attention can be given them, consequently fewer die of disease; they are kept clean, and no lice afflict them; particular breeds can be kept by themselves; sick ones can be noticed; they can be easily counted; in fact, every attention can be paid them at a small outlay of labor as compared to the same number of chicks under hens. Hens cannot hover large chicks, and as a consequence they will lose some of the broods before the young ones are well feathered.

Production of Eggs in Winter

As it is now midwinter, it is not out of place to discuss the feeding of hens for the production of eggs in winter. Farmers must get away from the regulation diet of corn and wheat. One of the chief difficulties of egg-production in the winter is the lack of green food, and too large a proportion of grain is fed. While there is a fair proportion of the nitrogen in wheat needful for the production of eggs, there is, in addition, too much fat-producing material. This fat in the system clogs up the reproductive organs, and the value of the hen as a layer is destroyed. It is not green food, so much as bulky food, that the hens need, and with it plenty of exercise. Instead of feeding grain three times a day, try it once in the day—in the evening. In the morning give them bulky food. This may be composed of finely chopped clover hay, steeped and fed warm, and sprinkled over with a small quantity of ground grain. If the hens are fed at noon, let the food consist of about an ounce of lean meat for each hen. In this way one will provide nitrogen for the hens without loading them down with surplus fat. When feeding the grain, scatter it in a litter of dry leaves, chopped straw or dry dirt, in order that they will have to scratch for it. This will provide exercise, although a spoonful of grain or millet-seed thrown in the yard once or twice during the day will encourage the hens to scratch for the occasional morsel they will get. Proper food and exercise mean health for the hens, and healthy hens mean profit for the poultry-raiser. For variety, chopped cabbage, cooked turnips, potatoes, or in fact any of the vegetables, make excellent foods in place of the chopped hay, or even in place of the grain. If grass is fed once a day the supply will be sufficient. It is more harmful to overfeed than to feed sparingly.

Laying and Condition

Though apparently in the best condition, with combs red and bright, the plumage clear, and the fowls seemingly in the best order, it frequently happens that no eggs are secured. If one of the hens be killed, and an examination made, the liver will be found to be greatly enlarged, perhaps covered with white spots, and the intestines lined with fat. Sudden death from apoplexy will not be unusual, and diarrhea sometimes sets in. All this is due to feeding too much grain and getting the fowls out of condition. When hens eat well, appear healthy, and do not lay, the first duty is to reduce the feed. To fully observe the hens and keep them in condition, use the scales, and weigh one or two selected hens at least once a week. If they gain an ounce or two, reduce the grain. If they just hold their own, then the amount of food is correct. If they fall off, give them more food. If the hens are very fat at the beginning, first diet them by giving each hen for a week or ten days only an ounce of lean meat for her ration, and give her one teaspoonful of millet-seed in litter or dirt, to compel her to work, which will reduce her in flesh. Some kind of hanging scales would permit of weighing a dozen hens in a few minutes. Use numbered leg-bands, and keep a record of the hens. Do this, and you will save money, get more eggs, and learn to know just how much a fowl should have. It will be found that some hens will gain when others lose, and if so, put the poor ones together. With the scales one will fully understand in a few days how to select the hens (or weigh all) for weighing, and the saving in expense, with the gain in eggs, will pay for the work bestowed.

Home Consumption

It is always in order for the farmer to supply himself with poultry and eggs before shipping to market. There is not a great deal of difference in the price of meat, while poultry, which is easily digested, should be more on farmers' tables than it is. The staple meat product used on the farm is pork, but the farmer should endeavor to have a greater variety. The poultry-yards should not be regarded only as a means to make more money. If it helps to make farm life more attractive, it will be no less profitable than if added directly to the bank-account. Every article consumed at home finds a market, and entails no expense for transportation.

Roup Remedies

Roup remedies are of but little avail, as too much work is necessary in handling birds and administering the cures, which are not always efficacious. A remedy often recommended, and which is simple and inexpensive, is to give the bird a pill of assafetida as large as a bean twice a day, and to inject at the same time two drops (using a sewing-machine oil-can) of the following mixture in each nostril, and four drops down the throat: Camphorated oil, one dram; water, one dram; carbolic acid, ten drops. Keep the bird in a dry, warm place. Roup may be known by foul odor, discharge from the nostrils, hoarse breathing, and sometimes swelled head and closed eyes.

Poultry Products

It is doubtful if the figures of the government census-reports regarding poultry are correct, owing to the difficulty of securing facts; but it is admitted that a comparison of figures shows that the sum derived from poultry and eggs is much larger than from some animals, and it is not creditable to us to also state that, despite all we can do to supply the demand for eggs, importations of them are being made from Germany every year. France, with a limited area as compared with ours, produces eggs to the value of forty million dollars annually. This vast sum is the production of those of limited means, the keeping of poultry being not exclusively in the hands of the wealthy, but within the province of all. The total value of the production of poultry in this country is about one hundred million dollars, which is sufficient to impress upon those interested the importance of poultry as a source of wealth to farmers and also suburban residents.

Inquiries Answered

WINTER BREEDS.—R. W., Winona, Minn., requests advice as to "which breed should be preferred for a severely cold climate." Much depends upon quarters and management. It is possible that the Light Brahmas, which have small pea-combs, will prove as satisfactory as any other breed. To select the best breed would be difficult.

CROSSING THE BREEDS.—E. M., Pottstown, Pa., asks if "a Minorca or Leghorn male should be preferred for crossing with Plymouth Rock hens." It will make no difference which male is selected for such purposes. It is better to keep the breeds pure, for as a rule those who begin crossing the breeds usually allow the flock to degenerate into "mixed" non-descripts.

MILLET-SEED.—A. C. J., Hastings, Neb., is desirous of "feeding millet-seed as a portion of the ration for fowls, but is not certain of the quantity to allow a flock." A quart of millet-seed once a day to twenty fowls, with other food, will not be too much in winter. Such seed contains considerable oil, hence one fourth that quantity should answer. Always scatter the seeds if possible.

The Chop Feed
from ear corn and the grains is mixed right and ground just as coarse or fine as desired with
Quaker City Grinding Mills
They run on ball bearings and combine light running with fast grinding. Double hopper gives even mixing. Suited to every kind of feed grinding and make a fine table meal. Special purpose burrs and sacking attachment when wanted. Unequivocal guarantee of durability and satisfaction goes with every mill. Sold on trial. Return at our expense if not satisfactory. 37th Annual Catalog free. Lowest prices on gas and gasoline engines and other powers.
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Prices Right. FINE POULTRY
Royal Incubator Co., Dept. 61, Des Moines, Ia.

We want Girls
and boys in every city and town, who are bright and energetic, and who want to make some money for some particular purpose, or who would like to have a *steady income*. It is the most pleasant work possible, and will bring you in contact with the finest people. Can be done after school. Write us at once. Circulation Dept. FARM AND FIRESIDE, Springfield, Ohio.

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Mr. Cypbers, formerly of tbe Cyphers Incubator Co., Buffalo, N. Y. bas severed his connection with that concern and established a new organization under tbe title of Chas. A. Cyphers Co. for the manufacture of incubators and brooders of a much improved style. It will pay you to write for a copy of bis preliminary circular and ask to be registered for a copy of his 1904 catalogue which will be ready about Jan. 10th. Address
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Send for a copy of the INLAND POULTRY JOURNAL, and receive a fine color picture free. Cost us $400 costs yon nothing. Our paper has the admiration of every poultry man. Have yon seen it? Well do not miss it. Address
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in the poultry business just as we have if you follow the same plans. We tell all about what we have done and how we did it, in our new year book,
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Gives cuts of every variety of fowl, together with prices for singles, pairs, trios and pens, and eggs for hatching, in season. Cuts and plans for poultry houses. It cost too much money and time to be given away, but is sent for 10 cents.
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Never Disappoints
When you put eggs—fertile eggs into
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you are never disappointed with the results. Not only hatches tbem all; but hatches chicks that are strong, lively and vigorons. Guaranteed. Tbe cheapest, good incubator made. Catalog Free.
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are built on correct principles; are absolutely reliable; will last a lifetime, and the price is right too. Our mammoth big catalog tells all about them, and the chicken business. It's a corker, and a five-cent stamp will bring it to you. Address,
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BOND STEEL POST CO., Adrian, Michigan

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Our new premium list for 1904 is now ready for distribution. It contains a collection of the most liberal premiums ever offered for getting clubs of subscriptions. Write to-day for it. It is sent free. A postal-card will do.
FARM AND FIRESIDE
SPRINGFIELD, OHIO

The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

Change of Road

H. C., Ohio, wants to know how to have a road changed.

Petition the county commissioners or the township trustees.

Interest Allowed in Connecticut

L. A. S., Connecticut, wishes to know: "What is the highest rate of interest in Connecticut?"

The legal rate of interest is six per cent, but there is no penalty for usury.

What Makes a Home in a Legal Sense

Miss S. asks: "Will you please tell the readers of the FARM AND FIRESIDE what makes a place a home in the legal sense? For example, a man hires a room in one town, where he keeps his clothing, books, and occasionally spends the night; he works, or does business, in an adjoining town, and spends most of his nights at the home of a friend in another near-by town. Which is legally his home, or place of residence? Would the same rule of law that decides what a man's place of residence is apply in the case of a woman? I am referring to the laws of Massachusetts."

A home, as usually defined, is a permanent place of abode or residence, with the intention to remain, and it would seem that the first place mentioned should properly be considered his home. Usually the same rule would apply to a woman, especially if she were single.

Fruit Included in Rental

L. S., New York, asks: "A. rents of B. a house and lot with fruit-trees on it. There was no agreement that B. should have any of the fruit. Has B. any right, when the fruit is about to be gathered, to notify A. not to sell anything off the place? What would you advise A. to do should B. try to gather the fruit?"

There being no reservation in the lease, the fruit unquestionably belongs to the tenant. A. should not permit B. to gather the fruit. He might have B. arrested for trespassing, or sue him for damages, should he attempt to gather it.

Married Woman's Liabilities

I. E. M., Oregon, writes: "If a man and his wife give a note for a certain amount, and afterward the man dies, can the person to whom the note is due take all the wife's property as payment? Could she sell or transfer her personal property to her son, who is of age, and thus keep her creditors from attaching it?——If a woman and her son rent a farm on shares, the former being in debt, and they sell the crop to pay rent on the place, can her creditors sue for the money thus spent before they had served an attachment on the crop?"

The payee can sell all of the wife's property except what is exempt from execution.——No to the rest of the inquiry.

Inheritance of Property

C. E. C., Rhode Island, writes: "A. died in Rhode Island, leaving an estate inherited from his father and mother. He left no heirs except a widow and uncles and aunts on both his father's and mother's side. After setting aside the widow's dower and paying the debts of the estate (for which purpose the estate had to be sold), the property he inherited from his father was set off to his uncles and aunts on his father's side, and what was inherited from his mother was set off to his uncles and aunts on his mother's side. An uncle on A.'s father's side died in California, leaving no family, but considerable property in that state. A. had borrowed money, and advanced it toward settling his uncle's estate in California, which sum was one of the debts on A.'s estate. Said estate in California was not settled when A. died. To whom should A.'s part of the property in California go—to his father's or his mother's relatives, or to both?"

The statute of California provides: "If there is neither issue, husband, wife, father or mother, then in equal shares to the brothers or sisters of the deceased, and to the children of any deceased brother or sister by right of representation."

Delivery of Goods

H. K., South Dakota, writes: "A. buys from B. a threshing-machine and other tools which are forty miles from the residence of A. in the hands of a third party. B. takes A. out to look at them, and on their return A. agrees to take them, but has no place to put them for thirty days. A. buys the tools, to be delivered at his residence, and suggests that a contract be made to cover the deal. B. is very anxious for a note to be signed, and at last A. signs a note and executes a mortgage on the machinery, insisting that the clause 'goods to be delivered in good condition in thirty days' be inserted. At the end of thirty days B. has a chance to get a very desirable position, and wants A. to assist in the delivery. A. does so, B. going to see that the machinery is all there. B. now claims that he delivered the goods where they were, and refuses to stand breakage and loss on the move. Would this be a delivery? If so, would the mortgage and note previously given be binding? A. finds the goods to be not as represented. Can he recover from B?"

It rather seems to me that the seller will have to stand the breakage and loss on the move. The note and mortgage would be good, but a claim for damage and so forth could be set up against the same unless the note was sold before due. If goods were not as represented, I think A. could recover from B., unless A. bought them on his own judgment, and did not rely on B.'s representations.

Statute Against Perpetuities

E. M. C., Canada, writes: "A. dies, leaving property to B. as long as he lives. When B. dies it goes to C. as long as C. lives. After C.'s death it passes to D., who can dispose of it or do as he likes with it. Is the will legal? Is there any way in which D. can get the property from C.?"

Yes, the will is legal, but it may not be effective. There is a statute in Ohio which reads: "No estate in fee simple, fee tail or any lesser estate in lands or tenements lying within this state shall be given or granted by deed or will to any person or persons but such as are in being, or to the immediate issue or descendants of such as are in being, at the time of making such deed or will; and all estates given in fee tail shall be and remain an absolute estate in fee simple to the issue of the first donee in fee tail." I cannot understand how D. can get the property, when by the will he must wait until C. dies. It is more likely to rest absolutely in C. and his heirs, and perhaps D. will never get it.

Rights in Property

F. J. T., Iowa, inquires: "A widow with a son and daughter, having a house and lot all paid for, married. Her husband built an addition to the house, and bought several pieces of furniture and tools, and her son built a barn on her real estate. She died, and the son put in a bill for part of the value of the barn, and the husband put in a bill for everything he had bought and built, including the addition, at its full cost at the time it was built, six years ago. He would not pay the funeral expenses, nor the doctor's bill, and would not take the stuff he bought, as it is now old, so it was sold by the administrator. Can he collect all of his bill? Can the son collect for the barn, or can he move it?"

Unless the mother and wife agreed to pay the husband and son for the improvements, I should think it extremely doubtful whether they could collect for them. If you place a building upon the lot of another, with no agreement with the owner as to pay or removal, usually you can neither recover nor remove it.

Right to Wages When Contract is Broken

V. V. C., Moline, writes: "I worked last year on a farm in Minnesota. I took one term for five and one half months, beginning on the fifteenth of June, for one hundred and seventy dollars. In September I had a fight with another hand who worked upon the same farm, and the employer took choice for the latter. I was in the right, and told the farmer that I could not live there longer, and asked him for my money. He told me if I wanted the money I must stay there until the first of December. I can't do that, because I don't like to live in trouble. I had worked for the farmer seventy-two days. Has the farmer the right to keep all my money?"

I doubt very much if you can collect any of the money unless you work out your time. The mere fact that it would be unpleasant, or disagreeable, to work with a person would not be a sufficient excuse for you to quit. When a man contracts to work for a certain time, and then quits before his time is out without a sufficient excuse, he can recover nothing for the time he has worked.

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for the soft bunches—Paste for the hard ones. A 45-minute application and the lameness goes. Lots of blemish information in the free book we send.
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Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in fifteen to thirty days.
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is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Write for our free book on diseases and blemishes of horses.
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ELECTRIC Handy Farm Wagons
make the work easier for both the man and team. The tires being wide they do not cut into the ground; the labor of loading is reduced many times, because of the short lift. They are equipped with our famous Electric Steel Wheels, either straight or stagger spokes. Wheels any height from 24 to 60 inches. White hickory axles, steel hounds. Guaranteed to carry 4000 lbs. Why not get started right by putting in one of these wagons. We make our steel wheels to fit any wagon. Write for the catalog. It is free.
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The Maule motto for more than 25 years. My new
SEED BOOK for 1904
Cost over $50,000 to publish. If you have a garden you can have a copy for the asking. Send a postal for it to
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GENERAL AGENTS WANTED
The SEGMENT Corn and Bean Planter. *2,000 dozen sold last year.* Never cracks a kernel nor skips a hill. Simplest, lightest, most durable and most accurate. Frictionless slide. Genuine Chinese bristles brush, which never mats. Hopper and spout galvanized iron. Working parts stamped out of sheet steel, which means absolute uniformity, extreme lightness and great strength. Will make favorable contract with men competent to handle territory and control sub-agents. Ask for Contract No. 9.
GREENVILLE PLANTER CO., Greenville, Mich.

AUTO-POP, AUTO-SPRAY.
Great cleaning attachment on perfect compressed air sprayer. Note how easy—cleans nozzle every time used, saves half the mixture. Brass pump, 4 gal. tank. 12 plunger strokes compresses air to spray ¼ acre. We manufacture the largest line in America of high grade hand and power sprayers. Catalog free.
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A Feed Mill
at little cost that grinds mixed grains, shelled corn or cob corn.
The New Holland
meets exactly the feeder's wants, with free trial to prove it. Speedy, strong, light running. 3 sizes, suited to any power. Write for free catalogue.
NEW HOLLAND MACHINE CO., Box 116, NEW HOLLAND, PA.

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Worth twice the money. Ten pkt, s and Catalog of Seeds and Bee Supplies of all kinds for 15c. Early Wakefield Cabbage, Early Beet, Early Frame Cucumber, Imp. Hanson Lettuce, Snowball Radish, Favorite Tomato, Purple Top Turnip, Sweet Peas, Nasturtium, Pansy. Large Red Wethersfield Onion lb. 80c. Quality high, Prices low. Will save you money.
MARTZ SEED CO., Seed Growers. Grundy Center, Iowa.

LAWN FENCE
Many designs. Cheap as wood. 32 page Catalogue free. Special Prices to Cemeteries and Churches. Address
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Full Line. Best Stock. Low Prices.
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BERRY PLANTS—60-page Catalogue FREE. Ground-mole trap FREE with each order.
HUNTSVILLE NURSERIES, Huntsville, Ohio.

Around the Fireside

Two Ways Diverse

My neighbor's daughter weds to-day;
Lo, radiant guests in fair array
Group 'round the bloom-decked altar, where
In reverence kneel the bridal pair.

(My daughter lies beneath the sod;
The flowers she loved—the goldenrod
And lily—twine about the spot;
She heeds them not, she heeds them not.)

My neighbor's son stands at her side,
In youthful manhood's strength and pride.
Glad with the might of sturdy arm
To comfort and to shield from harm.

(My son is in his quiet grave;
There pansies nod and rosebuds wave—
His favorites in the long ago;
He does not know, he does not know.)

My neighbor sheltered rests at home,
Her sure retreat though wide she roam;
(I sit beside a stranger's board,
In what chance cheer such may afford.)

Two ways diverse; yet over each
The same blue heavens shining reach;
Though hers the joy, mine grief instead,
God is not dead; God is not dead.
—Marion Flower Harmon, in The Independent.

Burning of Iroquois Theater, Chicago

ONE of the most dreadful catastrophies within the memory of living man took place Wednesday afternoon, December 30th, in Chicago. Over half a thousand persons lost their lives in a fire which occurred in the new Iroquois Theater of that city.

A matinée performance of the play known as "Mr. Bluebeard" was in progress. The house was filled to the limit of its capacity. Women and children composed the major portion of the audience. The second act of the play, called "In the Pale Moonlight," was on. A calcium light used to secure a moonlight effect failed to burn properly. A falling spark caught the flimsy draperies of the stage-settings. Eddie Foy, the star actor, stepped to the front of the stage. The chorus-girls fled in terror. Mr. Foy told the people that there was a slight fire at the rear of the stage. "There is no danger," he said, and ordered the orchestra to play a lively air. He then ordered the asbestos curtain lowered. It came half way down, and stuck. All efforts to move it were in vain. Some one saw a greedy flame creeping panther-like down the side of the proscenium arch and over the tops of the boxes. Then it made a wild leap across the house for the balconies.

A woman's voice shrieked "Fire." A thousand human beings rushed madly toward the doors. The next moment a terrific explosion lifted the entire roof of the doomed theater. It fell back with a crash of glass and breaking timbers. The gas-tanks had been touched by the fire.

Over one thousand people in the orchestra-seats, with easy access to the doors, gradually made their way to safety, but most of them threw aside wraps, pocketbooks, hats—everything that seemed to burden them in their rush for life and the open air. In spite of the panic, in spite of the suffocation, nearly all of them were saved.

Men, women and little children filled the balconies. These were the prey of the frantic fire fiend. Frenzied with fear, they pushed forward in the darkness toward the doors, only to find them locked. Their bodies were piled ten feet high when found by the firemen later on. Self-preservation became the universal law. Great, burly men crushed to death under their feet the frail forms of delicate women. The cries of dying children, the screams of frantic mothers and the hoarse groans of perishing men filled the theater from dome to pit.

Dozens of others, swept, carried, dragged or thrown out to the stairways, and even beyond them, down to the landings in actual sight of the daylight that streamed through the big front doors—in sight of the throngs outside, the fire-wagons and the smoking horses—died in great masses seven and eight feet high, limbs mingled fearfully together, clothing burnt off and faces caught in their last agonies, all turned toward the doors they could not reach.

Firemen, policemen, priests, worked shoulder to shoulder in an heroic effort to save human life. Above the loud cries of the fire-chiefs, giving orders to their men, above the awful din of groan and shriek and dying cry, rose the solemn words of a Catholic priest, "Put your trust in God." Across the way, in the Northwestern University Building, the Holy Sacrament was being administered to hundreds of the faithful who had been snatched from the burning, only to die later in awful agony.

Every store in the neighborhood was transformed into a temporary hospital or undertaker's establishment. Two large restaurants flung their tables and counters on top of one another, and laid out great heaps of table-linen to be used for bandages for the wounded and coverings for the dead. All the great State Street stores threw their main floors open, and sent to the theater great piles of blankets, rubber cloth—anything and everything that could be utilized.

Every drug-store in the down-town district was emptied of everything that could possibly be of service.

Ambulances were reinforced by dozens of wagons from these stores and teaming establishments, and from everywhere willing helpers poured out to do or give what they could. In a little while, with frantic thousands trying to batter through strong lines of police flung across the corners of Dearborn and State Streets, the bodies of the dead came faster and faster, until it seemed as if there were no place to lay them.

Every physician and surgeon in the city was called by telephone, and told of the disaster. Every hospital was asked to send a small army of trained nurses.

People from many neighboring towns and from distant cities were witnessing "Mr. Bluebeard," and many of these were among the victims.

Many persons who looked upon the blackened and crushed bodies of their friends or kinsmen went stark mad. Hundreds fainted. The whole city is in sackcloth and ashes. Hundreds of mothers sit, like Rachel of old, weeping for their children, refusing to be comforted, because they are not.

The merrymaking with which the new year is usually ushered in was wholly abandoned. By order of Carter Harrison, Chicago's mayor, not a whistle blew nor a bell rang as the clocks tolled out the twelve solemn midnight strokes. Hopeless grief and desolation greeted the advent of 1904.

Once before Chicago was visited by a fearful fire, but this is a thousand times worse when the frightful loss of life is taken into consideration. In that fire home after home went up in flame; in this human beings fell like drops of snow, dead or fatally injured.

The responsibility for this terrible tragedy may never be properly placed.

The Iroquois was a new theater. "Mr. Bluebeard" was the first play put upon its boards. It was conceded to be the safest and most nearly fire-proof playhouse in Chicago. And yet a thousand homes are desolate, and a whole nation is cast into gloom. A spark fell from an electric light; an asbestos curtain failed to do its work. L. K. W.

Memory in Children

An investigation into the power of memory in children was recently made by the director of the department of child-study for the Chicago public schools. It was found, among other interesting results, that there is no "memory period"—no period in early school life when the memory is stronger than it is at any later portion of the child's life, a period especially adapted for learning to spell. "While there are no memory stages, there are undoubtedly periods of interest that are especially favorable for the child's learning to spell—times when the child is aroused from indifference or from a feeling that spelling is a small part of life to a recognition that it is important. It has been pointed out that during early school life the auditory memory is the stronger, and later that the visual memory is stronger. During the whole of school life the audio-visual memory is stronger than either the auditory or visual; that is, a simultaneous appeal to both sight and hearing produces a richer and more usable image than is brought about by an appeal to either sense alone. It would seem from this that the more senses we can appeal to, the deeper will be the impression."—Scientific American.

Pony Courtship

When the brave heart of an Osage warrior falls captive to a maiden's charms, it is not long until he, as if setting an example to his white cousin, takes his father and mother into his confidence. Forthwith the wigwam of the noble sire is moved, accompanied by all the accoutrements of Cupid's Indian wars, and pitched near enough to Minnehaha's tent so that the Osage Hiawatha, if he has not forgotten his archery, can shoot an arrow beyond it. But now, like other papas, Minnie's wants to know how strong in unselfishness is the hand that seeks hers. So he says, in effect, "If you want her, pony up." And this is just what Hiawatha literally proceeds to do. He brings say five ponies, and hitches them in front of his sweetheart's tepee. Soon afterward Minnie's father comes out, deliberately unties them, and lets them go scampering off over the plain, for they are not enough to offer for a daughter so charming as his. When Hiawatha has succeeded in catching them, he adds perhaps two more, and ties the seven before the wigwam of his lady love, only to see them go galloping away as before. This continues until the number has grown sufficiently large to be an acceptable expression of a lover's devotion in the eyes of Minnie's pa, whereupon he unlooses them again, but takes them this time to the rear of his tent, and ties them among his own. And now there is merrymaking at Hiawatha's tepee, for he sees the success of his wooing.—E. M. Sweet, in The World To-Day.

Mosquitoes in Court

In a recent action in a Southern court mosquitoes were parties to the suit. A contest was involved of much interest to entomologists and physicians, as well as lawyers. It was in a town whose leading institutions are a college and a cotton-factory. In the institution of learning, tertian malaria, in which fever recurs every two days, and quartan malaria, in which the fever recurs every three days, developed among the students.

Members of the faculty, accepting the conclusions of specialists that the micro-organism of malaria is transmitted by mosquitoes, sought to discover their breeding-place. In the entire vicinity the only body of water of any size was the pond that supplied power for the wheels of the cotton-factory. That water, the professors declared, was undoubtedly the prolific source of the malaria-carrying insects. Appeal was made to the factory-owners to drain the pond, and substitute steam or electricity as motive power.

This the cotton men would not do, and the authority of the board of health was invoked. Its members, having posted themselves upon the etiology of malaria, agreed with the professors that the mill-pond must be the breeding-place of the swarms of mosquitoes that infested the neighborhood. It was, of course, a very serious matter to interfere with the local cotton-manufacturing industry, but as the malarial cases at the college were on the increase, the order was given that the dams must be demolished and the pond emptied.

The cotton men got a stay of proceedings. In the court contest the lawyers sprung a surprise. They conceded that malaria is spread by mosquitoes, and that these insects are aquatic in their origin, but they demanded evidence to prove that any mosquito larvæ had ever been deposited or hatched in the mill-pond.

This question only experts could answer, and so in the interests of justice and sanitation eminent scientists of Washington were sent for and commissioned by the court and the parties concerned to thoroughly examine the field. Investigations disclosed surprising conditions.

The most minute search failed to locate a single mosquito larva in the mill-pond, but in ditches in the vicinity of the college, in water-filled post-holes, in water-barrels, old tin cans containing water, in cisterns and old wells, malarial mosquitoes of the genus "Anopheles" were found to be breeding in vast numbers. More curious still, one of the most prolific sources of the noxious insects was a puddle in the back yard of the secretary of the board of health.

The explanation was thereupon furnished the court that mosquitoes seek still water for their hatching-place, with preference for water covered with scum. Running streams, or ponds rippled freely by wind, wreck the frail membrane that supports the larvæ of the "Anopheles" genus. Hence, the puddles, ditches, holes, cans, cisterns and wells of this Southern town were turning out countless millions of the pests, whereas the mill-pond, whose stone-built banks were free from algæ and whose broad surface was kept in frequent motion by the air, was about the only standing water in the entire community in which mosquitoes were not breeding.

To satisfy all parties that this condition prevailed, twelve young scientists, recently graduated, were offered a reward of fifty dollars apiece for every mosquito larva found in the mill-pond. These young experts, who knew the ways of the insect, searched the pond with great thoroughness, but as a result of their scientific crusade only one mosquito larva was found, and that in so fragile a condition that it expired before it could be offered in evidence.

As a result, the case of the college against the factory was thrown out of court, and the cotton establishment, employing six hundred people and doing a business of nearly two million dollars annually, was saved to the town.

Now a crusade to drain small pools, empty all mosquito-breeding receptacles and pour petroleum oil on ditches where water runs is under way in the vicinity, and the contagion of the scientific work promises to extend to other sections of the South.—Saturday Evening Post.

Largest Sailing-Vessel in the World

The largest sailing-vessel that the world has yet seen, the seven-masted schooner "Thomas W. Lawson," lately launched at the magnificent yard of the Fore River Ship and Engine Company, at Quincy, Mass., is unique in many respects. To begin with, she is the only ship ever built having seven masts, six being the greatest venture hitherto. Moreover, she marks the limit of transition from wood to steel in the construction of the hull, all other schooners having been built of wood, which, however, was not of sufficient strength for the giant frame of the "Lawson." Her lower masts and bow-sprits are of tubular steel, and her top-masts of Oregon pine tower one hundred and fifty-five feet above the deck. She is four hundred and three feet over all, fifty feet wide, and has a load draft of twenty-six and one half feet. She is designed for the coal trade, and will carry eight thousand one hundred tons at a trip, enough for a winter supply for a town of five thousand inhabitants. She spreads over an acre of canvas, and her enormous sails are hoisted and lowered by steam, only sixteen men being required for her crew. From his desk in the cabin aft the captain can communicate by telephone with any part of the ship. She has her own electric-light plant, and she is heated throughout by steam, the cabin furnishings, a suite of rooms, being as fine as those of a wealthy city household. In this splendid suite one of the principal owners, a brother of the captain, spent his honeymoon, his wedding journey being the maiden trip of the vessel to Newport News for a cargo of coal.

The names given the seven masts are as follows, beginning with the foremost: Fore, main, mizzen, jigger, spanker, driver and pusher. It has been humorously suggested that the tend of these names is such that the vessel should make excellent speed.—The Presbyterian.

Out in the World

W. Bourke Cockran has been decided upon as the Tammany candidate for Congress in the Twelfth District, to succeed Mayor-elect George B. McClellan.

The proposed enlargement of the London post-office has brought out the fact that the one and one half acres of land desired for the site is worth one million two hundred thousand dollars.

Preparations are being made for the establishment of a national bank on the World's Fair grounds at St. Louis. A charter has been applied for, and a meeting to elect officers and directors will be called. The bank is to be owned jointly by all bankers of the city having financial interest in the Exposition. The institution is to be known as Bankers' National.

From a recently published report it appears that the total number of employees on the French railways was as follows: Managers and clerks, 3,076; traffic department, 116,927; locomotive and rolling stock, 74,248; road and buildings, 75,177; making a total of 269,428, of whom 26,754 were women. The salaries of the officials and workmen do not run high, and are regulated more by the time the man has been in the employ of the company than by the kind of work he is called upon to perform, except, of course, in the case of skilled artisans.

Officers of the Ordnance Department have made several trips in the suburbs of Washington on the new automobile battery-wagon and forge recently made for the army. They have ridden up and down all the steep hills in that vicinity, and over the roughest roads they could find, and are very well satisfied with the performance of the big machine. It is provided with a winch, to pull the wagon up particularly steep grades, but so far it has not been found necessary to use it on any of the roads in that vicinity. A practical demonstration of the portable forge and machine shop was made recently at the cavalry post at Fort Myer in the manufacture of horseshoes, etc. It is intended to send the wagon with a battery of field-artillery on a practice march into the country in the spring.—New Orleans Picayune.

Around the Fireside

Babes of Other Lands

THE spirit of the Christmas-tide being still fresh upon us, we have deemed it desirable to devote considerable space this issue to juvenile illustrations and reading matter. Remembering that our Lord was once a tiny babe, and that we have just celebrated his birthday, it is natural that all babies should be of interest to Christians everywhere.

On this page we are using photographs of three babies. The first is a Persian of high class, the second a Brittany baby, with its nurse, and the third an English infant of the royal blood. A careful study of the pictured Persian baby and nurse will reveal several very interesting things.

The nurse is quite the most prominent figure in the illustration, and indeed she is equally prominent in the Persian home. The "wet-nurse" of the Persians is looked upon as the child's second mother, and is usually provided for by the parents for life. Her costume consists first of a gingham chemise, then a tunic, and several short skirts of great width gathered with a draw-string, the outer one being of loud-patterned chintz. Among the rich this garment is usually of silk. Over her head is thrown a "char-kadd," or large square of embroidered cotton, folded, it will be observed, to display the corners. These shawls are generally fastened under the chin with a huge brooch.

The feet of Persian women are thrust into two huge bags when they go out on the streets. We may judge, therefore, that Madame Nurse has just returned from a promenade. The children are swaddled in infancy, but as soon as they are able to walk they are dressed like little men and women. The curious part of this custom is that the girl babies are dressed like little men, and the boys appear in all the complex paraphernalia of young women. This fashion has no other incentive, it would seem, than its fun-provoking qualities.

The Breton babe presents a rather laughable appearance as it lies in the arms of its nurse. The women and men of Brittany, rich and poor, are fond of bright colors, worn in startling contrasts. The nurse in the picture is in all probability "gotten up" in a combination of bright reds, blues and yellows set off by her white bonnet and gay kerchief. This has been the fashion in Brittany for years, as the people there cling with great tenacity to their local customs and religious superstitions. Witchcraft and fairies are firmly believed in by all classes, and one can easily imagine that the nurse in the picture is silently appealing to the good fairies to strew with roses the path of her charge, upon whose funny little features she is gazing with so much tenderness.

BRETON NURSE AND CHILD

HIGH-CLASS PERSIAN BABE AND NURSE

The third baby of our group lies in the cradle, or "cot," which was the first resting-place of the present King of England, Edward VII., and in our "mind's eye" we can easily picture the figure of the good "Queen Vic." leaning over her little son, and planning, as all mothers do, for his future career. King Edward's grandson, Prince Edward, was also rocked in this quaint little cradle-bed.

L. K. W.

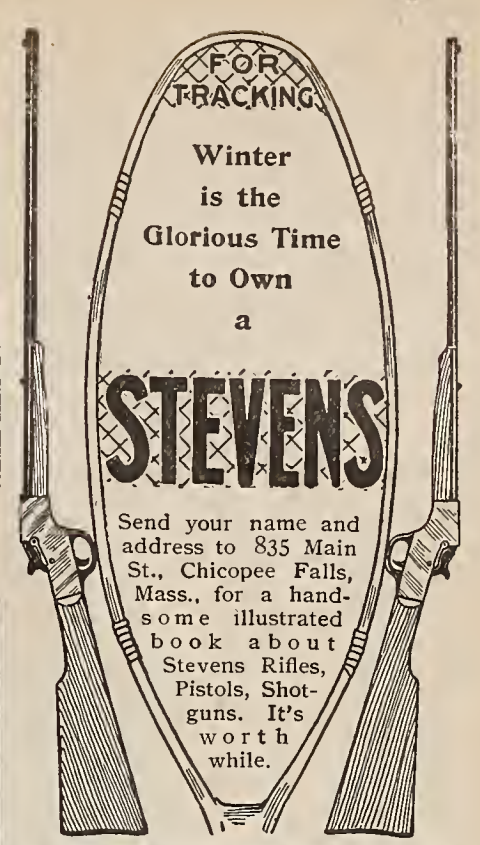
KING EDWARD'S CRADLE

Herbert Spencer Dead

The death of Herbert Spencer, at the age of eighty-three, closes an extraordinary career. He is one of the few exceptions to the rule that the leading minds of Great Britain have been university-trained men; deprived of the privileges of Oxford and Cambridge, he was educated privately by his father, a teacher, and his uncle, a clergyman. He spent seven years in the work of a civil engineer, and at the age of thirty began writing for the great reviews. His chief labor has been the application of the evolutionary theory to all branches of human knowledge, seeking thereby to formulate and unify all sciences—psychological, political, metaphysical, ethical and material—into one great scheme of "synthetic philosophy." He was a worker of vast energy; his style as a writer was singularly lucid, vigorous and attractive; he claimed all spheres of human knowledge as his own, and he accomplished an unparalleled amount of research, compilation, analysis and speculation. No living man may wisely venture to guess how much of his extraordinary labors will pass muster a century hence, nor what final estimate will be formed as to his colossal theories and generalizations. But of one thing we may rest assured—he will be reckoned one of the most fertile, astute, comprehensive and mighty intellectual forces let loose upon our planet in modern times. His doctrine concerning God is worth recalling just here. He found, as the final result of his far-reaching inquiries, back of all phenomena, an inscrutable Force. He denominated that Force "the Absolute." Whether or not, in the usual sense of the term, there is a Personal Being at the head of and behind the universe, he could not tell. Indeed, he denied that finite man has power to know the qualities, relations and attributes of the Infinite. He argued that we may be assured that there is an Absolute Force as the center and source of all things, but contended that we have no faculties nor abilities whereby we may know What or Who or Where that Force, "the Absolute," is. Now that his work is done, we may reflect to our profit on the fact that this great evolutionary philosopher could not construct his theory of the universe upon a purely material basis, but was driven by his logic to posit "the Absolute"—or to use our own revered term, the Almighty, the Supreme Being—as the basis of all phenomena.—Western Christian Advocate.

Edward Everett Hale

Edward Everett Hale, who has lately been chosen by the Republican caucus as chaplain of the United States Senate, and has accepted the place, is a famous author, preacher and philanthropist, who has been prominent in organizing lend-a-hand clubs and in promoting Chautauqua Circles. He was born in Boston April 3, 1822, and was graduated from Harvard in 1839. A few years later he was licensed to preach, and filled pulpits in Worcester, Mass., and Hartford, Conn. Since 1856 he has been minister of the South Congregational (Unitarian) Church. He has written several stories and histories, and has been editorially connected with many literary journals.—Chicago Record-Herald.



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To Lessen Friction

It is ever the study of the wise mechanic to accomplish the reduction of friction in all machinery. The higher the speed of any machine, the greater the danger from friction. But what about the most wonderful, most priceless machine of all—this body? We must concede to the sterner sex a good measure of wisdom in the matter of the care of the human mechanism as regards dress, exercise and relaxation. It is to the woman that our thoughts turn especially at this time.

More than one man has been known to say that if he were shut up for a month to the work of house and home, as his sister is, he should either die or lose his reason. Of course, the elements of temperament and education have to be taken into account in a statement of this kind. But allowing for these, the fact remains that women are under a daily stress and strain of friction, which is unnecessary and highly dangerous. Indeed, few of us escape more or less of the disastrous results.

It is in the power of every intelligent woman to minimize the production of friction—that is to say, the wear and tear on the nerves. Let me enumerate some friction-lessening methods:

First, the woman who works about the house in corsets, be she thin or otherwise, is doing herself a wrong which cannot be estimated. We know very well what an outcry will rise up at this—that "I should feel as if I were coming to pieces!" "I could not hold myself up!" "What would become of my figure?" We can but answer to every such remark, "The more shame and pity to you for the bondage you are under." The writer knows a woman who weighs two hundred and twenty-five pounds, and who since a girl has worn corsets only when on the street, and whose figure is a surprise to people when they learn her weight. "How well you carry yourself!" is the sure comment. She carries herself well because her muscles do their own work; her bust is as Nature intended it should be; she does not have to work against a coat of mail, or even so slight—but it is not slight—a resistant as the "summer" corset. Let any woman who is honest and brave begin at once, lay aside her corset for house-wear, bear with the poor released body for a month, and no amount of arguing will ever replace the odious invention save when she is on the street.

"How shall I dress in the house?" she asks. Probably exactly as she dresses now. Shirt-waists and skirts cannot be worn without corsets unless the wearer be very slight and firm in build; but there is an endless variety of jackets, sacques, house-dresses and kimonos which are pretty, modest, comfortable, and will help, without the corset, to change the whole tenor of a woman's physical life.

Second, baths are needed for other purposes than that of mere cleanliness. The bath for rest and tone is not indulged in half often enough—not a tithe often enough—and in some cases women never think of such a thing. "Tub night" was an institution in one worthy family I knew, and I will not here decry the virtues of the weekly bath. But far better is the rule of elasticity—jump into the bath-tub whenever you feel like it, and sometimes when you do not. Cold baths, hot baths, tepid baths, salt baths, soda baths, sulphur baths, rub-downs—all these are in the program of one of the healthiest women I know. "I think I must have used a Pacific Ocean of water in my lifetime," she said to me once, and my thought was that it was worth it. She buys washing-soda by the ten-pound quantities, and keeps it in the bath-room in a stone crock with a cover. A heaped-up large coffee-cupful is the measure for one bath-tubful of water. It will not harm the tenderest skin, and has no equal for results in cooling and cleansing the skin. The friend referred to discovered this for herself, and had the satisfaction of having her discovery heartily ratified by a physician. He said, also, that "it is hard to convince women of such simple things."

Third, there are few women these days who cannot use the piano, and not many who fail to neglect their music after domestic responsibilities settle upon them. Is there one woman in fifty who really uses her music to make her own way through life smoother? Suppose you are ironing, or perplexed about some matter, or simply weary. Leave the ironing-board for a few minutes—time yourself, if you will, and make it ten—drop the perplexity, move in spite of the weariness, and play over that new piece or that dear old piece you used to play to "him" on moonlight nights. You will be surprised to find your whole being tone up or let down, according to the moment's need. And why not? Can you not iron or think better for the rest? It is neither selfish nor foolish to do that which does us good.

Fourth, a change, even though it be a very little one, is a tonic to many a woman who treads in the track of the common round six days, and maybe seven, in the week. But how shall she get it? Perhaps the nearest town is ten miles away. Dress up, and go there: visit a school or a graveyard or the stores; take lunch at the hotel or restaurant; open your eyes, and determine to see something new or strange before you go home. It will give you something to talk about and think about out of the daily grind. Try a change of sleeping-rooms, if it be only a cot up in the attic. Make up your bed the way it used to be made when you were a girl. Be "silly" for once, and take "along up" a plate of cookies and apples or bananas and a real good story—go out and buy or borrow one for the purpose. Go to bed early, and read and munch until you feel sleepy. Just be a reckless, care-free girl with malice aforethought. These little changes are warranted to smooth out at least five wrinkles each time indulged in. Make your plan some day—this is for simple weariness—to stay in bed all day, and do it this way: Rise at the usual time long enough to smooth your hair, wash your face and hands and tired feet; smooth out and air your bed and room. Shift your head, if necessary, so that the light will come from behind. Gather up a number of favorite books and magazines. Have a glassful of water and a plate of fruit handy. Go to bed, and stay there until nearly supper-time. Read, sleep, kick, roll, doze, just as Nature inclines, only stay there. Get up in time to take a full bath and dress for supper or late dinner, as the case may be, and two hours after eating, undress, and go to bed again. Another bath in the morning will complete the cure. You will be ten years younger. Dine on fruit that day—it will not hurt you.

I know, of course, that such things as these are impossible to some women with large families. Still, there are things they can do, if they will, and things they ought to do, that the wheels of life may be lubricated, friction lessened, and nerve-explosions, wear and tear reduced to the minimum. A woman who will not plan intelligently to keep herself sweet in mind and nerve as well as body is just so far a criminal, and deserves all the punishment she receives; but unfortunately she makes others suffer with her. Further—But the editor cries halt, and halt I must.

ADA MELVILLE SHAW.

LACE COLLAR

Lace Collar

The collar illustrated is made of dark cream silk Moverenne braid, worked with cream silk twist, and cream Duchess lace sewed all around the edge for a finish. O. M.

Some Christmas Preparations

There are many ladies who would not get ready for Christmas months before that happy day comes around, simply because they enjoy the rush and bustle of shopping late in December, when the stores are crowded, and even the tired clerks wear a holiday smile. Then, too, they say you have so little to select from before the Christmas articles are displayed, which is very true; but when economy is to be considered, it is well to pick up gifts when you may, if they are really cheap.

Last summer I happened to find during a midsummer sale of dry-goods some beautiful embroidered handkerchiefs, which were soiled and mussed, but very cheap. Now, I fancy some one is thinking, "I would not like to give a washed handkerchief as a Christmas present, and I certainly would not like to receive one." But wait a minute. These washed handkerchiefs are to do duty as dainty corset-covers, and some of them set together with beading will make an elegant dresser-scarf. One of the finest of all is to be the front of a baby's pillow-case, with plain Victoria lawn for the back, and perhaps the others will go for dusting-caps, though they are too pretty to be used that way.

Then there are the dolls for the little nieces and friends in the family. I found them last winter, shortly after the holiday season, for just half price, when the stores were trying to close out toys to make room for spring goods. To be sure, the kid bodies were somewhat soiled, and several shoes were missing, but little things like that can easily be repaired. A damp cloth cleaned the bodies, and the shoeless dolls were dressed in long clothes for the wee girlies, and shod with baby socks of bright wool. The dear children will think Mrs. Santa Claus got them ready on purpose that way, and so she did.

I always feel sorry for the children who find dolls on Christmas morning whose clothes are sewed fast to the bodies. It does make lots of work if a busy mother must stop to pick up doll garments left on the floor by the heedless girls, but that is no excuse for sewing the dresses fast, and robbing the little mothers of untold pleasure in dressing and undressing the cherished babies. Teach the children to pick up things as soon as they are through playing, or give them a corner of the sitting-room for a playhouse, and you will have no trouble. It is usually the dolls that are dressed the day before Christmas that suffer this indignity, for those prepared weeks before almost always have carefully prepared wardrobes. I know of no way to make little girls happier than to present them with a box (trunk) of extra doll clothes that can be taken off and put on innumerable times a day.

I discovered recently that for five cents one could get a box of beads that would make two strings, while those in the stores sell for ten and twenty-five cents a strand. Stringing beads may seem very childish work, but it is a very pleasant occupation for summer afternoons, and even if you buy the strings in the store you must string them over in a short time, as the threads are quite brittle. Take stout silk (wash-silk at ten cents a ball) or strong fine linen thread if you want your work to last, for children will not remember to watch, no matter how many times you tell them.

The autumn is the ideal time to make pillows, when corn-husks are in their prime, and chicken-feathers are so common in every farm-house. There are enough good feathers wasted from the chickens that are fried every fall by the housewife to stuff hundreds of cushions, but many women think they are not fit to use. For porch and floor pillows there is nothing better, unless it be the fragrant white husks shredded fine as ribbons. There are pretty handkerchiefs, honest ginghams and gay denims in the stores this minute, and you will have no prettier pillows by waiting until the holiday stock comes in, than these reliable stand-bys, unless you pay fancy prices for novelties.

So I am going to continue to search for bargains every time I go to town, and not despise the soiled things that a little labor can make clean, nor the remnants that need close figuring to make them worth buying, for it is worth everything to have your presents all planned and your work well in hand by November. And when the Christmas rush comes, I am going to be in it, too, to pick up some gay trifles and enjoy the fun, but not to vex my soul trying to find dozens of presents in a few hours, and go home cross and dissatisfied with the result. HILDA RICHMOND.

A Bookcase-Curtain

A very pretty and durable curtain for a bookcase may be made of burlap. One noticed recently was light brown, with trimmings of red. A brass rod was fastened to the top of the bookcase, and the drapery was thrown over it so as to form a deep lambrequin at the top. The burlap was lined throughout with Turkey-red. Red felt was used for a border across the top and bottom. This was feather-stitched to the burlap with red worsted in clusters of six quite long stitches, the middle stitch being the longest, and were graduated toward each end, with a space of about an inch between each cluster.

The border of felt across the lambrequin end of the curtain was about eight inches deep. Across the bottom of the curtain the border was a little deeper, and was set up from the bottom, leaving about five inches of the burlap below it.

It was an extremely effective curtain, and was made very quickly and with little expense by a busy housekeeper.

The use of burlap is being revived for a number of purposes. It is often used as a substitute for wall-paper—sometimes in the form of a deep frieze with the paper below; or a figured burlap is used upon the walls, with plain burlap for frieze and dado, or frieze only. It comes in green, blue, red and brown; in fact, nearly every color may be procured.—Helen M. Richardson, in Ladies' World.

A Thistle Pin-Ball

A thistle pin-ball is a novelty. The materials for this are three yards of lilac ribbon one and one half inches wide (this will make three thistles), a small piece of green velvet, some wire or rubber flower-stems, and three fourths of a yard of either green or lilac ribbon for a bow. Cut the ribbon into three pieces, and cut the cord edge from one side the length of the ribbon. Fringe it to within one fourth of an inch of the other edge. Roll it tightly, and sew at the top, leaving the fringe to fluff out to make the thistle part. Now take a circle of green velvet measuring about three and one half inches across. Gather around the edge. Sew the stem to the thistle part, and make a small hole in the middle of the velvet, and run the stem through. Stuff the green with sawdust, draw up tightly about the thistle, and when you have stuck the green top with pins, to give a spiky look, your flower is complete.—The Modern Priscilla.

THISTLE PIN-BALL

Cakes to Imitate Playing-Cards

To make these cakes, use a recipe for a good fine-grained cake. Bake in shallow pans, so that when cut the pieces will be very thin. Cut in the shape of cards, frost with white frosting, and use candied cherries to show the spots on the cards. Hearts and diamonds may be cut from the cherries with a knife, or use the cherries whole to imitate the ace, the three or six spot, as desired. A cooky instead of a cake mixture can be used. These cakes are very nice for refreshment at a card-party.

MRS. J. R. MACKINTOSH.

"A Hint to the Wise"

If you want to shut off the view from any window, dissolve in a little hot water as much Epsom salts as the water will absorb. Paint this over the window while hot, and when dry you will have a very fair imitation of ground glass.—Ladies' World.

The Housewife

The Baby's Picture

BY SUSIE BOUCHELLE WIGHT

I RECEIVED your letter this morning, my dear Ethyl, and I am replying to it immediately, because one clause of it has set me off into a train of thought which I must share with you while there may be time for it to do good. I think you hinted to me once that the giving of advice was my ruling passion; but I feel free to proceed, because I remember other occasions when you have wished you had paid more heed to my besetment instead of going on in your own headstrong way.

You write me that my grandnephew, Adelbert Palmerstoun, has grown into such a handsome boy that you are going to try to get a good picture of him, to send across the continent to me. Now, my dear niece, I beg of you "don't!" As sure as you take young Adelbert to your photographer with preconceived notions in your head as to the pose the boy is to take, the expression he is to wear, he will either weep dolefully, or rend your heart by an exhibition of naughtiness at the psychological moment, and the photographer will say things to his lady assistant as soon as you are safely out of hearing. In your experience with your three children you must surely have learned in this time that a baby cannot be depended upon for anything in this world except the unexpected.

Of course, it is natural and right for you mothers to wish to preserve the bewitching baby graces, the fleeting moments of angel loveliness, and even the dawn of deviltry in the happy laughing eyes, but do not expect to catch such phases when you have dressed him within an inch of his life, and then distressfully harassed him and that long-suffering gentleman who advertises "baby portraits a specialty" in your strenuous efforts to force the boy's emotions to order. To get these cunning pictures, when Adelbert looks as if he were about to burst into a peal of laughter, when he is making mud pies or rollicking with his dog, as well as those angelic shadows when the sweet eyes look upward with a seraph's own smile, you must catch him with a kodak when he is entirely unconscious of any presence except his own.

I understand, however, that you wish him to have a photograph from the very best hands and with the finest finish. Well, then, dress him as prettily as you like, and do not tell him anything about his destination. The studio will seem to him as a fresh hit of earth's wonderland, his eyes and mouth will express his wide-awake childish curiosity, and he will be ready to believe all the myths of birds and animals which the friendly photographer will perjure his soul to relate to him, or to smile bewitchingly at the tinkling of a bell. Poor little dears! Do you never feel sorry for their disappointment when, after gazing breathlessly at the mysterious black thing in front of them, waiting the appearance of the promised wonder, they hear a little click, a long-drawn breath, a relieved "Now," and are taken away, with no new impression, or at best only a glimpse of a toy not half so pretty as those in the nursery at home?

I would not care for Adelbert to be laughing very obviously in his photograph. There is such a thing as getting very tired of the fixed smile of a picture, while the simple composed lines of a loved face are fresh and lovely every time you look at it. Just take Adelbert to your photographer, who knows a great deal more about his business than you can possibly tell him, and leave the two to manage the situation alone, while you wait patiently and quietly in the reception-room, and I feel sure you will send me a picture so pretty and sweet that I will get up in the night and light the candle to look at it. I hope you will also send me a picture of the oldest girl—she is just at the age to make a charming portrait. Gratify your motherly vanity and her dawning femininity by having her little picture frock as dainty as a dream; and since little arms and shoulders are so appealingly lovely, let the gown be quite décolleté, or pile her pretty red hair on top of her head, and get a half-length photograph, almost without drapery.

If you send me a picture of the dear little new baby, you are at liberty to do all the fussing you wish about that, for she is too newly come from heaven's own clime for it to be possible to make her self-conscious by anything you may do or say. Put her in a bower of blossoms as sweet and pure as her own little self, surround her with a very menagerie of pets, and the little face will still look out smiling, pure-eyed and unlined.

I confess to no artistic training, no artistic perceptions, but in offering these reflections to you, Ethyl dear, I am voicing what to people in general constitutes a charming child-picture; and away back in the remote corners of my mind there is some sort of regard for the feeling of the little victim, and also of the poor man whose duty it is to catch the beloved shadow of the child.

Your Aunt,
ALETHEA CUMMING.

Little Household Helps

I have found that worn-out and discarded wire from door and window screens is not worthless. The best pieces of a wire screen cut in convenient sizes make excellent covers for vessels containing milk, for puddings just removed from the stove, or other food set out to cool. These wire covers may be reinforced with thin strips of wood tacked along the edges, and when thus used may still perform their original work of screening something from flies and bugs.

My seven-year-old Dorothy, who has just entered upon her first year of school, did not relish her cold lunch at noon, and for several days brought nearly all of it home again in the evening. I tried to get dainties to wrap in the white napkin, but they did not prove tempting. I thought one afternoon that the napkin in the closed-up lunch-basket might be the source of the trouble. After that I always wrapped her lunch in clean paraffin-paper. Dorothy says that it now opens sweet-smelling and inviting.

Pepper and salt mixed in proper proportion in a dish of convenient size should be in every kitchen for the cook's use. I keep the mixture in two vessels—one open, for use by the spoon; the other a baking-powder box, with tightly closing lid pierced with nail-holes, through which the pepper and salt may be sprinkled over any dish requiring such treatment. The mixture has another advantage, especially when the weather is damp—the presence of the pepper helps to banish the moisture from the salt.

When working with fruit, from paring apples to seeding cherries or raisins, always have beside you a bowl — not a basin — of clean water and a bit of dry muslin. Sticky fingers may then be frequently washed and wiped, and the work pursued in comfort and without interruption.

Those who are enjoying the use of aluminium cooking-utensils have noticed that the card of instructions for their care advises scraping with a wooden spoon any part where the cooking has stuck to the ware. A wooden paddle is the thing for this purpose, being handier than a spoon. SUE H. MCSPARRAN.

Overheard in the Garden

"Ladybug, ladybug, fly away home;
Your house is on fire, your children will burn."

"THAT is the children's joke, you know—a joke between them and me. They pretend to believe it, and so do I; and I always fly away when they bid me. I love the dear children. They never harm me in any way."

"Well, Mrs. Ladybug, perhaps they don't," croaked the old grasshopper, "but the joke they have with me is not quite so pretty, and it is all on their side. Even you wouldn't like to be caught by the legs, have your nose tapped on a stone and made to 'spit tobacco' before you were let go. That is what the precious darlings do to me. 'Spit tobacco, and I'll let you go,' they say. As if I chewed tobacco!"

"Ladybug, ladybug, fly away home"

"Why, don't you?" simpered the measuring-worm.

"No, I don't," answered the grasshopper, angrily, "and you know it."

"How should I?" giggled the measuring-worm.

"There, don't quarrel," pleaded the ladybug.

"You are well aware," continued the grasshopper, "that what I eject from my mouth is not tobacco."

"Ah! What is it, then?" persisted his tormentors.

"Why, it is—oh, ask the children! They know so much about us these days—more than we know about ourselves."

"So I will, the very next time I measure one for a new gown or suit of clothes."

"Do they really employ you to measure for them?" chirped the cricket.

"No, they don't," growled the grasshopper; "but they let her go prancing all over them because they think she is measuring, when it is only the way she walks."

"So let us return to our subject," interposed the ladybug.

"Chirp, chirp," sang the cricket. "I like the children, too. Why? Because they like me. They are always glad to hear me sing, and I bring good luck."

"As if I chewed tobacco!" said the grasshopper

"You do?" exclaimed the grasshopper.

"They say I do, at any rate; and I set them a grand example. I am so cheerful."

"How do you make that noise? Your singing, I mean," piped the granddaddy-long-legs.

"I hardly know whether I can explain," began the cricket.

"Ask the children," again suggested the grasshopper.

"I don't like the children much," murmured the caterpillar.

"Good reason," chuckled the grasshopper; "they hate you."

"Oh, no, they don't—not all of them; but, you see, I dearly love to crawl over their soft little necks and to rub my furry sides against their rosy cheeks, and when I do they make such a fuss one would think I was killing them, and they try so frantically to brush me off they frequently hurt me. No, I don't think I care much for the children—not while I am a caterpillar, at least; perhaps when I have become a butterfly—"

"Then they will catch you, and stick a pin through you, they will love you so much," remarked the grasshopper.

"Where do you hide when you are putting on your butterfly dress?" asked the June-bug.

"Why, you see, I wrap myself in a nice warm blanket—"

"Where do you get it?" chirped the cricket.

"Dear me! Why don't you ask the children?" said the grasshopper, merrily.

"The children think it will bring them bad luck to hurt me," cackled granddaddy-long-legs, "and they never do intentionally; but sometimes, when they try to make me find the cows for them, they hold me so tightly by one leg that it comes off."

"Does it ever grow on again?" inquired the cricket.

"Ask the children," said the grasshopper, drowsily.

"The only thing the children do that I dislike," said the June-bug, "is to tie a string to one of my legs and let me try to fly away. Of course, I can only go the length of the string, and there I buzz about trying to get off, and that is what they like."

"Why?" asked the cricket.

"Ask the—"

Just then other voices were heard—a laugh, a shout. The granddaddy-long-legs looked inquiringly at the June-bug, and the latter looked at the cricket.

"There they are now," said the caterpillar, in a hushed voice.

"Shall we stay and ask them?" said the cricket.

"Let's," said the ladybug.

The measuring-worm shook her head.

"I think we'd better go," said the old grasshopper, and he hopped into the shrubbery with the wild agility of youth; the cricket crouched low on the dark earth; the measuring-worm betook herself to the under side of the lily-leaf; granddaddy-long-legs scampered up the trunk of the apple-tree; the caterpillar hid herself under the garden-rake; the June-bug buzzed straight up into the air, and only the ladybug remained where she was, gently swaying on a blade of grass.

The voices came nearer; there was a stir in the air, and the ladybug held on tightly while the grass dipped low as two little children rushed by.

Girlie caught Boy's arm suddenly.

"I won!" shouted Boy.

"So you did," laughed Girlie; and they walked back, panting a little after their race.

"Take care!" she cried, "there is a ladybug."

Then the blade of grass was plucked, and the ladybug crawled onto the pink palm of a chubby little hand.

"Ladybug, ladybug, fly away home;
Your house is on fire, your children will burn."

And the ladybug flew away.

THE little boy stood with doleful face
On the edge of the frozen pond,
And the mermaid rose through a neat little hole
She had cut in the ice beyond;
And the tears rolled down the little boy's cheek
And the cheek of the pretty mermaid,
And "What, little boy, is the matter?" she sobbed,
As up in the sunlight she gracefully bobbed,
Forgetting her tresses to braid.

"Oh, this is the matter," the little boy wept,
"That every one else is so gay,
The air is so cool, and the sun is so bright,
And I can't go a-skating to-day!"

"Why not?" said the mermaid. "You've two little feet,
And the finest of skating awaits!"
"And what is the use of my feet," he replied,
"And what is the finest of skating," he cried,
"When I haven't—boo-hoo—any skates?"

"But why, pretty mermaid, pray, why do you weep,
Who ought to be nothing but gay?"
"Oh, the air is so cool, and the sun is so bright,
And I can't go a-skating to-day!"

"And what is the reason?" the little boy cried.
"The ice is as fine as can be;
You can dive like a fish, and I happen to know
There are plenty of skates in the sea."
Then the tears of the mermaid fell faster, and froze
As they fell, till they glittered like sleet.
"And what, little boy, does that matter?" cried she.
"All the skates in the ocean are nothing to me,
When I haven't—boo-hoo—any feet!"

A Tale of the Littlest Mouse

THE littlest mouse lived with his father and mother and little brothers in a small round nest in a field. He was very happy, playing in the field all day and going to sleep snug and warm at night in his grassy nest.

One day there came to visit them a big, sleek, fat gray mouse—a cousin who lived in a house on the other side of the street. The little field-mice were overawed.

"You would never be satisfied here if you saw my house," he said to them. "Such feasts as we have! There is always cheese in the dresser!"

The little mice opened their eyes. Very often, in their home, there was not enough food to go around. They knew what it is to go hungry to bed.

After the cousin had gone, the children asked their parents, "Why can't we live in a house, and have more than we want to eat? Why can't we be fat, and have a fine gray coat like cousin's?"

But the wise parents said, "Don't be carried away by such tales. Your cousin is proud, and makes the most of his good things. He didn't tell you about the cat that lives in the house and has eaten three of his family. He didn't tell you of the big steel traps laid around."

The littlest mouse thought differently. His parents did not understand, he thought. He wanted to find out for himself. So that night, after they had been snugly tucked in bed, and his parents had gone to sleep, he stole softly out across the dark field and into the street to his cousin's house.

The littlest mouse explained how he had stolen over and that he wanted to see the life his cousin had told him about.

"Well," said the big gray mouse, "come with me, and I'll show you around; but look out for the cat!"

They started on their journey through the big house; and the littlest mouse opened his eyes in wonder, and said many times that he wished he, too, might live there.

"You're happier where you are," said his cousin, shortly.

At last they reached the dining-room. There had been a midnight supper, and the careless maids had let it stand until morning. Here was a feast! There were pie and cake and crackers and cheese. Five other mice were there enjoying the good things, all of them as sleek and fat as the cousin. The littlest mouse followed their example, and began to enjoy himself, too. Just as their fun was at its height, there was a scuffle, a squeal and a scampering; for the big gray cat bounded into the room, and caught the mouse nearest the door.

Wild with fright, the other mice scampered away from the dangerous room, leaving their poor little comrade in the fearful clutches of the cat. They flew to their holes, the big gray cousin making room for the littlest mouse with him, and there they stayed, scarcely daring to breathe for a long time.

At last they ventured out again into the kitchen, and while the cousin nosed around, the littlest mouse spied a big piece of cheese in what he thought was a beautiful case. He made a dive for the tempting bit.

Snap! Click! The littlest mouse was fast. "Help! Help!" he cried.

The cousin ran to the rescue. "Oh, you silly mouse!" he cried. "You'll never get out. They'll come in the morning, and then they'll give you to the cat. Oh, it was just so with your poor cousin."

The littlest mouse was wild with fright. He struggled and he wriggled. Something sharp had cut his foot, but he hardly felt the pain. If he could only get loose and back to his own home! Would he ever see it again? He twisted in and out. Desperately he wriggled, until slowly but surely, inch by inch, he finally worked himself out.

"That's because you're such a little fellow," said the cousin, joyfully. "I never could have got out."

With a hurried good-by, the littlest mouse ran as fast as his bruised leg would let him, out of the house and across to his home. His mother had wakened, and missed him. How glad she was to see him! She cared for the poor sore foot, then wrapped him snugly in his little grass bed, where he went to sleep, happy and safe, resolving never to leave home again.—Anne Guilbert Mahon, in Kindergarten Review.

A Rare Occasion

Commander Peary, the Arctic explorer, was one day talking to a group of friends who were greatly interested about life in the extreme latitudes.

"Do you speak the Eskimo language?" asked one.

"Yes."

"What is it like? For instance, how would an Eskimo say 'good-morning?'"

"He wouldn't say it," returned the commander, with a smile.

"Not say it? Are social customs entirely lacking there?"

"No; but you see," said the explorer, "they would have occasion to use those words only once a year. So, you see, they don't have them."—Youth's Companion.

"The Lord is My Shepherd"

A LONG time ago a little girl learned the twenty-third psalm—learned it while in her Sunday-school class; and when she recited the beautiful words, there came to her a mental picture of the Shepherd in vivid robes of red and blue, bordered with wide bands of yellow, a yellow halo about his head, and a yellow crook in his hand; in his arms a little white lamb, and behind him, following after, a flock of sheep—some white, some yellow and some brown—but it left a gentle, tender feeling, with a lingering influence for good.

Afterward, a good many years, a young teacher taught the favorite psalm to her pupils; and often in the morning, after singing a hymn, the bright-eyed little people rose to their feet, and with bowed heads and in reverent tones recited the precious words of hope and trust, and their teacher fancied that she could feel the influence of the morning exercises in soft answers and gentle manners throughout the day.

Then, many years later, a tired woman, weary of work and worry, lay down to rest. The doctor said something about overwork and prostration; but the woman—once a merry little girl, and later an earnest, conscientious teacher—only drifted lower and lower on the ebb of life, further and further away from the care and toil that had bound her. By and by she came to the place where it seems quite as well, perhaps better, to fold the hands and drift out into eternity, because it is easier, than to struggle back to the duties and burdens of life, now so misty and far away.

Then by chance she looked out through the parted curtains, over the green meadows, to where a flock of sheep lay under the trees by the riverside. What were those shadowy words struggling through the mists of her languid brain? It came to her at last: "The Lord is my shepherd; I shall not want. He maketh me to lie down in the green pastures: he leadeth me beside the still waters." Yes, that was it. The sheep, resting in peace and contentment, gave no thought to yesterday or to-morrow. The shepherd hand that had fed and cared for them would feed and care for them still.

Then came the rest, drifting idly through her mind at first: "Yea, though I walk through the valley of the shadow of death, I will fear no evil; for thou art with me." Ah, the words, repeated so many times, held a meaning now. "This is the valley of the shadow," she said, "and I will fear no evil."

After a time she came slowly back to life and health again, and to the responsibilities that life must hold; but it was a new life to her, full of joy and peace and contentment.

"The Lord is my shepherd." Why burden one's self with care and worry over the yesterdays and the to-morrows? "I shall not want. Surely goodness and mercy shall follow me all the days of my life: and I shall dwell in the house of the Lord for ever." She understood at last.

GERTRUDE K. LAMBERT.

"Ye Are the Light of the World"

—Matthew v. 14.

God is the great spiritual dynamo of the world. This thought came to me one Sunday morning when listening to a sermon on the text, "Ye are the light of the world." In pursuance of the thought, I visited one of the Edison electric-lighting plants at Chicago, and learned the following things:

First, that all the forces of the air move in circles, and that they must return to the starting-point, regardless of obstructions.

Second, that the dynamo breaks up, concentrates and utilizes the power in the air, which, when so utilized, is known as electricity.

Third, that after the power is conveyed to the wires leading to the residences and various places to be illuminated, it cannot become LIGHT until the key at the entrance of the glass globe is turned.

Fourth, that, entering the globe via the film inclosed therein, it meets a resisting force in the shape of a bit of platinum, which it must overcome.

Fifth, that the overcoming of this resistance is light.

Sixth, that after its work as a lighting agent is done, it returns to its source—the dynamo.

Every soul that emanates from God must some day return to him. "And the spirit shall return unto the God who gave it."—Ecclesiastes xii. 7.

It remains wholly with us, as individual souls, to decide whether or not his power in us shall be "the light of the world."

Jesus said, "As long as I am in the world, I am the light of the world."—John ix. 5. And in Matthew v. 14 we find him saying to his followers, "Ye are the light of the world."

Follow me, if you please, through the different stages of divine light-making, as I followed the electrician from dynamo to incandescent globe, and observe why it is that Christ's children are the "light of the world."

When the divine dynamo sends down to a human soul a wave of spiritual life, the dynamo does not force the power into the globe. The question of its entrance lies with the human will, which, for the sake of carrying on our comparison, we will call the key. When man turns this key, and wills that God's power shall enter his soul, there is an immediate response.

But what does divine power meet when it comes into a human soul? Alas! at the very entrance it encounters the resisting power of sin. Yet if man's will be in accord with God's will, sin must yield, and the beautiful white Shechinah light of his presence fills the whole being with its glory.

When the work of the soul is finished, it returns to God. God manifests himself, it is true, through all his creations.

"Lo, the poor Indian, whose untutored mind
Sees God in stones and hears him in the wind."

Every beautiful sunset is a tribute to God, the Artist; every ripple of a tiny stream, and every thunder-tone of a great cataract, are tributes to God, the Musician; every rugged mountain-side, chiseled and fretted by storm and flood, is an indestructible monument to God, the Architect; and every fragrant flower of field or conservatory is an unwrit message from God, the Poet. But the great white love-light of his fatherhood is permitted to shine only through an immortal soul!

Verily, verily, "Ye are the light of the world," and it behooves every one of you—his "soul lamps"—to "let your light so shine before men that they may see your good works, and glorify your Father which is in heaven."

And then "thou, child, shalt be called the prophet of the Highest: for thou shalt go before the face of the Lord to prepare his ways;

"To give knowledge of salvation unto his people by the remission of their sins,

"Through the tender mercy of our God; whereby the dayspring from on high hath visited us,

"To give LIGHT to them that sit in darkness and in the shadow of death, to guide our feet into the way of peace."

LIDA KECK-WIGGINS.

Misuses of the Bible

For centuries this book has been misunderstood by its friends and misused by its enemies. Men have gone to this tree of life not for food and for the leaves that heal heart-hurts, but to hack and hew. The Bible is an orchard; its flowers have been fed to war-horses, and its boughs split into spear-shafts. The Bible is a mine; its silver has been run into bullets, and its gold wrought into sword-handles. The Bible is a spring of water; its guardians have fought over it, roiling the waters so that the people could not drink. Philosophers have taken texts full of sweetness and comfort, and hurled them as men hurl stones. Dogmatists have turned this storehouse of mercies into an arsenal of war, as the Turks hoisted their cannon into the Acropolis. Strange that sinfulness and ignorance should try to teach the dove eaglehood, or train the lamb to strike like a lion! Into what wars and strifes have men carried this book! How have men used its materials for building up barricades between themselves and their fellows! All these misuses have their reason. Great forces are liable to great perversions. Commerce is through tides and trade-winds, but what wafts the wise captain into the harbor will hurl the foolish one upon the rocks. The energies of this book, therefore, invite misuse and enmity. For this reason the Bible has never had a fair chance in the world. No generation knows what its principles will do for our race, for no generation has ever tried it. But it is not a book to be fought over. It is a book of conduct and disposition and character.—Rev. Dr. N. D. Hillis.

NATURE'S GREATEST CURE FOR MEN AND WOMEN

Swamp-Root is the Most Perfect Healer and Natural Aid to the Kidneys, Liver and Bladder Ever Discovered

"SWAMP-ROOT SAVED MY LIFE"

A Farmer's Strong Testimonial

I received promptly the sample bottle of your great kidney remedy, Swamp-Root.

I had an awful pain in my back, over the kidneys,

MR. T. S. APKER.

and had to urinate from four to seven times a night, often with smarting and burning. Brick-dust would settle in the urine. I lost twenty pounds in two weeks, and thought I would soon die. I took the first dose of your Swamp-Root in the evening at bedtime, and was very much surprised; I had to urinate but once that night, and the second night I did not get up until morning. I have used three bottles of Swamp-Root, and to-day am as well as ever.

I am a farmer, and am working every day, and weigh 190 pounds, the same that I weighed before I was taken sick.

Gratefully yours,

Sec. F. A. & I. U. 504. April 9th, 1903. T. S. APKER, Marsh Hill, Pa.

There comes a time to both men and women when sickness and poor health bring anxiety and trouble hard to bear; disappointment seems to follow every effort of physicians in our behalf, and remedies we try have little or no effect. In many such cases serious mistakes are made in doctoring, and not knowing what the disease is or what makes us sick. Kind Nature warns us by certain symptoms, which are unmistakable evidence of danger, such as too frequent desire to urinate, scanty supply, scalding irritation, pain or dull ache in the back—they tell us in silence that our kidneys need doctoring. If neglected now, the disease advances until the face looks pale or sallow, puffy or dark circles under the eyes, feet swell, and sometimes the heart acts badly.

There is comfort in knowing that Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, fulfils every wish in quickly relieving such troubles. It corrects inability to hold urine and scalding pain in passing it, and overcomes that unpleasant necessity of being compelled to get up many times during the night to urinate.

In taking this wonderful new discovery, Swamp-Root, you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered.

SWAMP-ROOT A BLESSING TO WOMEN

My kidneys and bladder gave me great trouble for over two months, and I suffered untold misery. I

MRS. E. AUSTIN.

became weak, emaciated and very much run down. I had great difficulty in retaining my urine, and was obliged to pass water very often night and day. After I had used a sample bottle of Dr. Kilmer's Swamp-Root, sent me on my request, I experienced relief, and I immediately bought of my druggist two large bottles, and continued taking it regularly. I am pleased to say that Swamp-Root cured me entirely. I can now stand on my feet all day without any bad symptoms whatever. Swamp-Root has proved a blessing to me. Gratefully yours,

MRS. E. AUSTIN,
19 Nassau St., Brooklyn, N. Y.

To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail

SPECIAL NOTE—If you are sick or "feel badly," send at once to Dr. Kilmer & Co., Binghamton, N. Y., who will gladly send you by mail immediately, without cost to you, a sample bottle of Swamp-Root, and a book telling all about it and containing many of the thousands upon thousands of testimonial letters received from men and women cured. In writing to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say that you read this generous offer in the FARM AND FIRESIDE.

Swamp-Root is pleasant to take. You can purchase the regular fifty-cent and one-dollar size bottles at the drug-stores everywhere. **Don't make any mistake, but remember the name, Swamp-Root, Dr. Kilmer's Swamp-Root, and the address, Binghamton, N. Y., on every bottle.**

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At Factory Prices

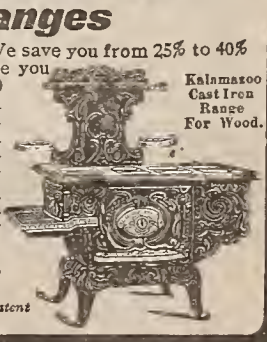
Direct from our own Factory.

Why pay your dealer from $5 to $40 more for a stove or range, when you can buy direct from our factory

KALAMAZOO

Stoves and Ranges

saving all dealers' and middlemen's profits? We save you from 25% to 40% on every purchase and you run no risk for we give you ***360 Days Approval Test*** and a guarantee under a $20,000 bank bond. If a Kalamazoo does not satisfy you in every way, send it back and we return every cent you paid. **We pay freight.** Can we make a fairer offer? We are selling thousands of both steel and cast iron stoves and ranges in all parts of the country, and can refer you to pleased customers in your own neighborhood. New patterns, large square ovens and guaranteed fire backs. All blacked and polished ready to set up. Send postal for **Approval Offer** and Catalog No. 183.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We make a complete line of stoves, ranges, heaters and **make them right**
We ship all Kalamazoos freight prepaid, blacked and polished and any one can set them up.
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THE NORTH ELECTRIC CO.
154 St. Clair Street, Cleveland, Ohio

How to Dress

Dressing the Baby

THOUGH common sense is still the leading idea in dressing the baby, yet the baby of today illustrates the fact that his mother keeps herself constantly in touch with the newest fashions.

He also makes it clear to all who have the honor of his acquaintance that his mother is a very wonderful person. For does she not do for him what she often cannot do for herself—dress him comfortably, and at the same time fashionably?

She discards entirely all tight bands and clothing for her growing child, and yet she believes in here and there a frill or two to soften the effect of an otherwise too simple and too severe dress. The result is that baby's clothes have an air of style, as well as of ease and comfort.

Babies' Long Cloak

The great advantage of this cloak for a baby is that the design can be used for both baby's everyday cloak which he wears when he goes out into the morning sunshine and also for his very best coat for dress-up occasions. The cloak is made with a very deep cape, which is the latest fashion this year, and has also so deep a turn-down collar that it has the effect of a pretty little shoulder-cape. The sleeves are full bishop-sleeves, finished with a band-cuff at the wrist.

CHILDREN'S CAPE-COAT

For the baby's best cloak use white Bengaline silk, line with quilted satin, and trim the coat with frills of lace. If a silk cloak, even for baby's best cloak, seems inadvisable, then use white Bedford cord for making it.

When this pattern is used for an everyday cloak, the lace frills are left off, and the cloak is made of either soft crepon eider-down, cashmere or French flannel. In color it should always be either oyster-white or cream-white. In making the cloak of crepon eider-down use a binding of silk in place of the lace for the trimming, but if cashmere or flannel is used, the cloak may be trimmed with ruffles of the material, hand-embroidered plainly or elaborately, as one chooses. A ruffle of cashmere or flannel merely finished with an embroidered scalloped edge is dainty and pretty. The pattern for the Babies' Long Cloak, No. 215, is cut in one size only.

BABIES' LONG CLOAK

Babies' Long Dress

Nainsook is used for this baby dress, which is made with a dainty square yoke of very fine tucks, with a little lace medallion in the center. The lower part of the dress is trimmed with medallions and a ruffle of lace, which is headed with a hand-embroidered band. The yoke may also be outlined with a very narrow band of the embroidery if desired.

With the pattern for the Babies' Long Dress, No. 216, which is cut in one size only, is given also a pattern for the little kimono sacque. The sacque is made of cashmere or flannel, hand-embroidered with a silk polka-dot and bound with ribbon the same shade as the dot. A dainty touch is given the ribbon binding by having it outlined with feather-stitching in the same shade as the material of the sacque.

BABIES' LONG DRESS

Children's Cape-Coat

Of course, when the baby reaches the dignity of walking, he must have a very smart-looking little coat. Here is a coat which is equally suitable for a little girl or a baby boy. It well illustrates how cleverly comfort and style may be combined in making children's garments. The coat is double-breasted, loose-fitting, and fastens at the left side. It is made with a deep shoulder-cape, and is trimmed with a silk scarf, fur and big buttons. In white velveteen, with bands of ermine on the cape and cuffs, and big smoked-pearl buttons set in silver rims for ornaments, this coat is warranted to make any baby look his very prettiest. White Faille silk, trimmed with white Tibet, would also make a lovely best coat for baby. Corduroy is another good material to use. To wear with this coat, a big hat of white beaver, velvet or Faille silk, trimmed with a white ostrich-feather, and tied with white ribbons just a little to the left of baby's chin, would be fashionably correct. The pattern for the Children's Cape-Coat, No. 218, is cut in 1, 2 and 4 year old sizes.

CHILDREN'S APRON

Russian Smock

Here is a little smock which is an attractive variation of the conventional model. It is made with a yoke in the front, the fullness starting below the yoke and being drawn down into the belt, which is so worn that the extremely long-waist effect is most pronounced. Fine serge is the best-wearing material for this smock, though flannel is also to be recommended. The smock buttons up the back, and has bishop-sleeves caught in at the wrist by a narrow band of trimming. Something new in the way of trimming for a little dress of this sort is narrow canvas bands worked in the sampler-stitch in pretty bright shades. However, any fancy braid may be used, or a good-wearing wool lace insertion. The pattern for the Russian Smock, No. 220, is cut in 2, 3 and 5 year old sizes.

RUSSIAN SMOCK

Children's Apron

This sleeveless, low-necked apron is made with fine tucks, which shape it prettily to the upper part of the body. Just a trifle above the waist-line the plaits open, making the skirt-portion of the apron extremely full. It is a fashionable and new little model. A frill of lace or hand-work embroidery outlines the low neck, which is finished with a ribbon-run beading, the ribbon tying in little upstanding bows on each shoulder. Lawn and nainsook are the materials that are most used for an apron of this sort. A pretty and novel idea in making this apron is to use white nainsook for the bertha frill, scattered with French knots in some delicate shade of silk, such as baby-blue, pale pink or canary-color. When this is used, the ribbon run through the beading should match in color the French knots, and the hem of the apron should be headed with a line of feather-stitching or brier-stitching in washable silk of the same shade. The pattern for the Children's Apron, No. 219, is cut in 2, 4 and 6 year old sizes.

Diaper-Drawers

Antiseptic absorbent diapering is one of the best materials to use for these sensible little diaper-drawers; or, if mother prefers, non-nettle flannel may be used. This is the flannel with such a very smooth surface that it is impossible to irritate baby's soft skin. The diaper-drawers fasten in front with narrow tapes. The pattern for the Diaper-Drawers, No. 217, is cut in one size only.

DIAPER-DRAWERS

PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention number and size of pattern desired.

Our Fall and Winter Catalogue sent to any address free.

90 Days' Trial

We sell more reliable merchandise by mail than any house in the world. Volume of sales regulates prices. No firm can undersell us on reliable goods; we refuse to handle the other kind.

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For 14.50 our Brunswick Seven Drawer, High Arm, Ball Bearing, Drop Head Machine is a beauty, one that will do all kinds of work and can be depended upon. Price is much lower than any other firm asks for equal quality. Mounted on handsome Automatic Drop Desk Quartered Oak Cabinet like picture, only 16.95

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and give you

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If at the end of that time you do not find that the merits of the

"1900" BALL-BEARING FAMILY WASHER

are so many and apparent as to induce you to purchase, return it at our expense. It costs you **nothing** either way. We cannot conceive how we can express stronger faith in our product than by this free-trial offer.

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is good enough when you erect memorials. **Marble** is such a failure that some cemeteries now prohibit its use. **Granite** is but little better; it gets discolored, moss-grown, cracks and crumbles. Besides, it is very expensive.

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and is also cheaper than granite. All we ask is a chance to present the evidence. Then act on your own judgment.

If you want cemetery work of any kind, large or small, write us, stating about what expense you anticipate. A selected variety of our fine designs, with prices and information about White Bronze, will be sent at once—and without putting you under any obligations. We deal direct and deliver everywhere. Write at once. Special inducements on winter orders. Agents Wanted.

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Prize Puzzles

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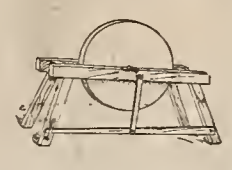
Residents of Springfield, Ohio, are not allowed to enter the contests.



THE KITCHEN CONUNDRUMS

Here are Six Conundrums, the Answer to Each Being an Article Found in the Kitchen. The First is Represented by the Large Picture on this Page. The Others You are to Answer Without the Aid of Pictures

1—What Kitchen Utensils Does the Picture Represent?
2—What Object Does a Certain Variety of Corn Suggest?
3—What Part of a Modern Kitchen's Furnishings is Suggested by a Drowning Man?
4—What Article of Kitchenware Does a Frightened Young Woman Bring to Mind?
5—What Very Handy Kitchen Article Bears the Name of a Fabled Forest God?
6—What is It that Bears the Name of One of the Most Important Ingredients of Every Palatable Dish, Combined with the Name of a Most Desirable Portion of Every Well-Appointed House?

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before February 1st.

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a three-sheet floral art calendar will be given for the first correct list of answers received from each state and territory. This means a calendar for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever they may be located. In the states where the cash prizes are awarded the prize calendar will be given to the person sending the second correct list, so that no one person will receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

ANSWERS TO PUZZLES IN THE DECEMBER 15th ISSUE

The Work-Basket Puzzle

1—Darner. 4—Needles.
2—Beeswax. 5—Yarn.
3—Hooks and Eyes. 6—Scissors.

The cash prizes are awarded as follows:

Girl's cash prize, two dollars—Ethel Hill, Macon, Georgia.

Boy's cash prize, two dollars—Fred A. Sawyer, East Jaffrey, New Hampshire.

Woman's cash prize, two dollars—Mrs. J. S. Swan, Washington, District of Columbia.

Man's cash prize, two dollars—Aaron C. Parrott, Checotah, Indian Territory.

As a consolation prize, a copy of "Robinson Crusoe" is awarded to the following persons for sending the first correct list of answers from their respective states:

Arkansas—R. D. Leas, Little Rock.
Canada—J. A. Lucas, Hamilton.
California—Wm. F. Pranty, Sunnyside.
Colorado—Mrs. Reba D. Talbot, Loveland.
Connecticut—Harold LeStrange, Woodbridge.
Delaware—K. Rittenhouse, Stateroad.
District of Columbia—L. F. Channon, Washington.
Florida—Mrs. Dell Johnson, Pensacola.
Georgia—James Comfort, Lawrenceville.
Idaho—Mrs. Susan E. Stevens, Boise.
Illinois—Maud M. McMillan, Canton.
Indiana—Clara M. Egan, Liberty.
Iowa—Miss Emilie Seltzer, Independence.
Kansas—W. T. Porter, Burlingame.
Kentucky—Blanche M. Gormley, Lexington.
Maryland—L. H. Jones, Elmer.
Massachusetts—Ellen Harvey, Townsend Harbor.
Michigan—Howard Devree, Grand Rapids.
Minnesota—George VanDam, Okabena.
Missouri—Mrs. Emma F. Bowman, West Plains.
Montana—Arthur Shepherd, East Helena.
Nebraska—Emma Mohler, Lincoln.
New Hampshire—Mrs. Nellie S. Heath, Manchester.
New Jersey—Jacob T. Hoffman, Elizabeth.
New York—Mrs. L. A. Rassner, Albany.
North Carolina—Mrs. H. C. Strayhorn, Thomasville.
North Dakota—Alson Brubaker, Fargo.
Ohio—Mary Pearce, Germantown.
Oregon—Mrs. O. H. Merrick, Elgin.
Pennsylvania—Gust. Kalback, Pittsburg.
Rhode Island—E. H. Macy, Newport.
South Carolina—Etta Browne, Denver.
Tennessee—W. E. Roadman, Church Hill.
Utah—J. A. Cederlund, Springville.
Vermont—Mary A. Dunn, New Haven Mills.
Virginia—John D. Gitchell, Charlottesville.
Washington—Genevieve Root, Kent.
West Virginia—Mrs. Della Border, Newburg.
Wisconsin—S. J. Denizan, LaCrosse.

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with a bad axe, but you don't draw temper while you grind eight times as fast as emery wheels on the electric diamond stone, **Carborundum,** making 4,000 revolutions a minute with the

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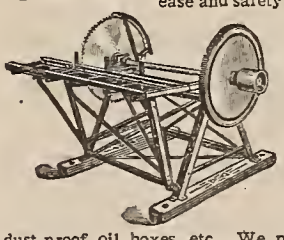

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Strong, rigid frame, adjustable dust-proof oil boxes, etc. We make five styles. Also the famous **"Hero" Friction-Feed Drag Saw,** Feed Grinders, Ensilage and Fodder Cutters, Huskers, Shellers, Sweep Horse Powers, Tread Powers, Wind Mills, etc. Write to-day for **free catalogue.**

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Comrades of Travel

By FRANK H. SWEET

CHAPTER XIII.

MONKEYS FOR PALM BEACH

ONE morning, several days later, Page was walking about the Poinciana grounds. There were few persons out. It still lacked an hour of the Cottage breakfast-time. Finally he drifted into the cocoanut grove, and took a seat near the arch. Two gardeners were at work on their knees among the small plants just beyond the path. He watched them idly. Suddenly he was almost knocked from the seat by a tremendous slap upon his shoulder.

"Page, by all that's square an' full measure!" a hearty voice roared, and Bill Wittles swung around in front of him, with both hands outstretched. "Shake, shake, boy; an' don't mind yankin' off a finger or two! Monkey's, but I'm glad to see you! I was seared that them Ancient City fellers would make things so soft you'd be for settlin' down with 'em for good an' all, or that they'd fleece you so you could only git off by hittin' the road. They've got their eye-teeth cut, they have. I know. I'm glad you've escaped. But say," anxiously, "they didn't draw out all the money you had, did they?"

"Not all," smiled Page.

"That's bully!" with a sigh of relief. "Not but what I'd let you have some if you happened to be flat, but I hate to see money spiled. Have a good time?"

"Very good."

"Run in with all the high amoosements—golf, polo an' them things?"

"I played golf a little."

"Dance, go yachtin', an' all that?"

"No; I didn't have time."

"Sho! that's too bad! But I'm glad you didn't blow in all your money. It won't spread any further here, mebbe, but there'll be more gilt-edge to it, an' I can help see the fun. Where'd you stop?"

"At the Alcazar."

Wittles bent forward, and gazed at him searchingly. Then his face cleared with a comprehensive wink and smile.

"That's how you came to have money left," he chuckled, but with a trace of disapproval in his voice. "I sort o' wish you hadn't, Page, even if you'd had to come down here flat. Them things don't help one who's in for high amoosements. The real swell don't take to 'em kindly. Then, somebody who spotted you up there might come down here an' let on, an' 'twould hurt your gilt-edge, Page, it most surely would. Folks here size up such things mighty quick. I s'pose your lay was waitin' on the table, or polishin' floors, or mebbe fetchin' an' carryin' things. No, you needn't tell me. I ain't pryin'. They're all square, honest jobs, an' gener'ly to be spoke of high; but they ain't no help to be swell.

"Now, don't think I mean to be hard on you, Page," dropping down upon the seat, and twisting around so that he could still look into his companion's face; "I don't. But I'm older'n you be, an' have seen some things. An' one of 'em is that ile an' water won't mix. An' that brings me down to what I was sayin' 'bout the rickshow business—on the train, you know. Since I've been here, an' seen behind the curtain, so to speak, I've known it wouldn't do, nor nothing like it. You've got the savoor-veever way that'll take you right in with the swells; but if they seen you snakin' 'round a rickshow in the mornin' an' then goin' on the golf-ground, an' mebbe cuttin' somebody's grass or pullin' weeds, an' then shakin' your foot with the Baltimore Orioles at a golf-ball, there'd be a split. Even your savoor couldn't mix it smooth. No, no, Page; it can't be did. You must stick to your savoor, for it's too val'able an' rare a gift to be wasted. An' as for the ile to keep things runnin'," lowering his voice, "I'm doin' pretty well now, an' will go halves with you. I've got a little hut over in the woods that don't cost much, an' cook my own grub. We can bunk in together, an' guests at either one o' the hotels will think you stop at the other. You can savoor all the time, an' chip in for all the high amoosements; but you mustn't spile it by tryin' to work. One kind earns at Palm Beach, an' one kind spends, an' they only have business ways together. Now, what do you say, Page?" he continued, in an anxious tone. "Will you let me furnish ile for your savoor? If you feel like you'd ruther, you can make it up to me sometime."

One of Wittles' big, horny hands was resting upon Page's knee. Page grasped it warmly.

"Thank you, Mr. Wittles," he said, earnestly. "I can't express what I think of this. It isn't often that one meets with such spontaneous, disinterested friendship. But while appreciating it, I'm glad there will be no necessity for burdening you. I have some funds left, and I have arranged for accommodations at one of the cottages."

"Well, it's all right, anyway," said Wittles, "an' I'm glad you're so well fixed. When the dough gives out, though, you must let me go halves. Will you?"

"Yes, I promise," answered Page.

"Then that's all right. But say," briskly, and changing the subject with his customary cheerfulness, "what I want to talk of mostly is this: You rec'lect what I said 'bout hatchin' up a new business—one piled up with money, you know?"

"Yes, I think I recollect something of the sort."

"Well, it's kept on fermentin' an' sizzlin', till now I've got the thing to where it's sure to be good straight liquor. I've looked 'round, an' figgered, an' read up, an' I tell you, Page, it's a big thing, an' sure. I've got it all planned, down to the very buttons on the monkeys' jackets. On the train I wouldn't let you into the consultation-room," apologetically, "but now you can have the whole outfit, with winders open. An' I'm goin' to take you in as partner, Page—full partner, with first countin' o' the money," his face beaming. "An' the piles of it—you've no idee! I've laid awake nights till my head got dizzy with the money. A marble house with terraces an' butler ain't nothing. But say," lowering his voice, and glancing anxiously at the two workmen across the path, "it ain't no use to holler the thing out loud yet. S'pose we go over to one o' them seats near the music-stand. They're more out o' the way."

He rose, and with another uneasy glance toward the unconscious workmen, tried to walk unconcernedly to one of the more secluded seats. Page followed him.

"Now, it's jest this way," Wittles began when they were once more seated. "But say, have you noticed anything special that Palm Beach lacks?"

Page considered a moment. "No, I don't think that I have," he replied. "The place seems complete."

"Well," said Wittles, "it's monkeys. That's the one thing that Palm Beach lacks, an' she lacks it bad. When ladies git off the train they'll look up at the cocoanuts, an' laugh, an' mebbe catch their breath a little, an' then say, 'Lovely, lovely! But doesn't it seem as though monkeys ought to be up there, too?'" Wittles smoothed his face, and tried to imitate the rapture in the ladies' voices. "An' the little kids," he went on; "they look up, an' say, 'Oh, papa! oh, mama! where's the monkeys? They have to pick the cocoanuts an' throw 'em down at folks, you know.' An' the kids'll seem awfully disapp'inted. An' then, only yesterday afternoon, Page, right here in the grove, I heard an old gentleman say, 'What a pity we haven't a few monkeys to race up an' down these palm-trunks. It would make the illusion complete.' So, you see, we have it from all sides," triumphantly. "Monkeys! monkeys! monkeys! Now don't you see my idee?"

"N-no, I can't say that I do, exactly."

"Well, I don't suppose 'tis easy," Wittles acknowledged; "it's something out o' the common. Not many men, even business ones, could 'a' hatched up such a thing. Well, it's this. Say, do you know the best place for monkeys—where they live mostly?"

"I am not quite sure. But many countries abound with them—India, Africa, parts of South America, and other places."

"Yes, I guess any o' them would do," said Wittles, thoughtfully, "though I wouldn't wonder if South America would be best, bein' handy. You see, we could have our schooner start from Miami, down below. That's a pretty good harbor, they say. We could slip through the keys, 'round Cuba, an' across the Carybean Sea, an' smack! there we'd be. Then we'd run up the Orinoke or Amazon, or some o' them big brooks, rush a few thousand monkeys on board, an' be back almost before we'd fairly got started out. There you have it, plain as a board-bill."

Page stepped forward with an exclamation of pleasure

"But you don't mean a whole cargo of monkeys?" asked Page, amazed.

"Yes, I do; a whole cargo—jest as many thousand as can be stowed away. The more, the better."

"And the schooner?"

"Oh, that'll be easy. We'll put up what dollars we have to spare, an' it'll be all right. I know a man who lives on a schooner, him an' his two boys. Summers they cruise 'round in out-o'-the-way places, an' pick up all sorts o' things—shells, sponges, sea-beans, alligators' eggs, sea-fans, an' such stuff; an' winters they go to Daytona an' St. Augustine an' Jacksonville, an' mebbe up to Savannah an' Charleston, an' lay by the wharves, an' open up a cur'osity-store on deck. They do fust-rate, the man told me, an' sell a slew o' stuff. O' course, it don't make a bit o' diff'rence to them where they cruise, so long's they git the cur'osities; an' it's plain to me there's no better place in the world for such things than the Orinoke an' Amazon. If we put up a hundred or so as a tip, they'll jump at the chance. Their boat's big an' roomy, an' though it's a long way from bein' new, an' has forgot all 'bout paint an' soap, it's solid enough to float everything that can be piled on. While they're gatherin' up cur'osities, we'll be gatherin' up monkeys. See?"

"Yes, I see," Page said; "but what I fail to understand is the financial side of the affair. How are you going to make money out of it? What will you do with the monkeys after you get them here?"

Wittles looked at him pityingly. "Ain't caught on yet, Page?" he asked. "Why, I thought you was smart. Ever see a hand-organ monkey?"

"Yes."

"Well, that's the idee. The hand-organ monkey is the hand-organ man's cashier. He passes the hat. Then ag'in, a monkey's easy trained—you crook your finger, an' he crooks his finger; you show you like money, an' he'll like money; you go to gatherin' it up an' shovin' it into your pocket, an' he'll begin to gather it up an' shove it into his pocket. See?"

Page shook his head helplessly.

"No? Well, when the monkeys come, we're goin' to take 'em to a place down below here, 'bout half way to the rubber-tree. I've got it all picked out. It's on one side o' the path, in the woods, an' ain't worth nothing to nobody. We'll fix up some sheds there, an' put the monkeys into trainin'. They'll have red coats an' white caps an' yeller britches, an' in the britches we'll have strong, deep pockets that won't spill out even if the monkeys stand on their heads. An' we'll furnish each one of 'em with a collection-box to take up offerin's. I guess we'll make 'em in the shape o' small cocoanuts. Then when the visitors begin to come, we'll scatter out the monkeys, one for every palm-tree; an' they'll be trained to offer their boxes with a bow when folks go by, an' then to scamper back up the tree to wait for more folks. When money's dropped in the box, they'll take it out an' slip it into their britches-pocket, jest like they've seen us do. An' Page," his voice trembling with eagerness, "you know what Palm Beach is. Cents an' nickels an' such small truck don't go here; it's nothing less than quarters. An' as for tippin', why, Palm Beach would go rheumatic if the exercise it gets in tippin' should be took off. It ain't a luxury here any more, but something that has to be did. Yesterday an old gentleman was walkin' along one o' these paths, when a bird flew in front o' him, an' he put his hand in his pocket, thinkin' 'twas something to be tipped. Now, jest put that to our monkeys," with a long, anticipatory breath. "Three or four hundred thousand monkeys, an' hundreds o' guests walkin' 'round the paths all the time, lookin' for something to tip. Do you s'pose a cute little monkey, comin' down a cocoanut-palm jest as nat'ral as life, an' bowin', wouldn't get nothing? No, sir-ee!" emphatically, "they wouldn't get left once in a hundred times, an' 'twould be from quarters up. An' now, jest imagine, Page, all them monkeys comin' troopin' home at night, with their britches-pockets weighed down so they have to limp, emptyin' out the money in one great heap for us to count!"

Page's face was twitching, but he did not laugh. The man beside him was too much in earnest.

"Do you think they can all be trained to come home at night, Mr. Wittles?" he asked, doubtfully. "How will you arrange about that?"

"Easy," Wittles replied, confidently. "We can find out what they like best to eat—everything, you know, has something it's crazy to get—an' we'll only feed that to 'em at night, in the sheds. Or, better still, we'll have a big chest all covered over with bright cloths, an' things that'll take their eye, an' every night while we're trainin' 'em we'll empty our britches-pockets into that chest, jest as it comes dark, an' o' course we'll have them do it, too. Then when they get to work in earnest, there won't be but one thing for 'em to do when dark comes—they'll feel obliged to hurry home to empty their britches-pockets into that chest. It'll be their monkey natur', an' 'twon't never fail."

Page bowed acquiescence. "You've got a wonderful head, Mr. Wittles," he said. "That plan certainly seems plausible."

"Yes, I think it's a pretty good plan myself," Wittles acknowledged, modestly. "O' course, you'll come in with me, Page. I'll furnish all the dough."

Page looked at his watch. "You must excuse me now, Mr. Wittles," he said, hurriedly; "it is my breakfast-hour. We will talk over this some other time."

CHAPTER XIV.

ON THE OCEAN PIER

Page had not yet encountered his acquaintances at the Inn. Except for the two days given to his land, most of his time was spent on the "Madeline." Each morning before breakfast, however, he took a long walk—to the rubber-tree, above Cragins, through the colored settlement, or perhaps along the ocean front. Thus he had familiarized himself with the "trails" and places of interest.

At this hour very few people were out. Only once had he seen Dorothy, and then it was at a distance, and she was on her wheel. She had not perceived him.

He had not called on them yet, although he intended to do so before long. Under the circumstances undue precipitation he thought might be undesirable. Then, too, there would be plenty of time, as he had decided to stay indefinitely.

He had not heard from Harry Thornton, although he had written, and even sent a telegram, for him to come on at once. Probably Harry was off somewhere, and had not received his communications. Perhaps he was already on his way south.

Mrs. Spencer-Browne rarely left the Inn except for the hour when she was "snaked 'round" by Bill Wittles, occasionally in a "ricksha," but oftener in a wheel-chair. At other times she was usually somewhere about the spacious office or parlors of the hotel, her silks rustling, her diamonds gleaming, her face beaming upon such of the guests as had been exalted to her approval. In the evenings she played solitaire, got up whist-parties, and secluded herself in some prominent corner with a chosen few, to pass approval or disapproval on the social life around them. And somehow Bill Wittles' designation of her as "the Duchess" had gone abroad and penetrated to the inner circles of the chosen few, and as "the Duchess" she was known even to her face, and the title was accepted by her with a dignified recognition of its justice and propriety.

Dorothy accompanied her aunt during the hour devoted to riding; but the exercise was too negative for her energetic nature, and after their return she usually went for a long walk. At this hour Page had thus far been on the lake. Only once had Dorothy been out on her wheel before breakfast. It was she whom Mrs. Payne had seen from the Dellmoore piazza.

On the day following the conversation with Bill Wittles, Page made but a short trip with the "Madeline." The wind was keen on the lake, and the water a little rough. They came in before noon.

As they went up the path toward the Cottage, Page looked at Mrs. Payne approvingly. There was a springiness in her step, a color in her face, which had not been there a short week before.

"Now run in and put on something lighter," he said, gaily. "The northwest wind has made it cool on the lake. but for that very reason it will be warm on the ocean side. We'll go over and listen to the music a while, and watch the bathers, and then go out on the ocean pier and have a look at the fishermen. They tell me it's quite interesting out there, though I have not seen it for myself yet. The water is unusually clear and transparent, and one can watch the various kinds of fish swimming about. And I believe the fishermen—even the ladies—catch quite a good many sharks, though they have to get stronger arms to pull them in. We will be back in time for lunch."

A week before Mrs. Payne would have found the walk wearisome, for it was a full half-mile to the ocean front; now she thought only of the clear, invigorating air and the interesting things around.

As they passed the Inn, Page glanced involuntarily toward the piazza, but no one was there whom he knew.

The orchestra was playing, and they took chairs where they could listen to the music and watch the bathers in the swimming-pool below. In the opposite direction they could see the end of the long pier, and the fishermen. There were quite a number of them, or of spectators, and they seemed to be having rare sport, for groups of them could be seen rushing from one rail to another, and excited exclamations and laughter came to the occupants of the pavilion.

Page noticed that his companion frequently glanced that way, and presently he rose. "Suppose we go down and watch them a while," he suggested. "The fish must be biting well to-day."

Mrs. Payne assented eagerly. "The water looks beautiful out there," she said. "I would rather watch it than the bathers. What a long, narrow pier it is!"

When they went out upon the pier, however, it did not seem narrow at all. It was only the extreme length that made it appear so. By the time they reached the end Mrs. Payne was glad to sit down for a moment upon one of the benches.

There were more spectators than fishermen, but they all seemed equally interested in the sport. At one moment they would be crowding toward a rail to watch a long, dark body flash through the water, then a cry of "shark" or "amberjack" or "kingfish" from the other side would hurry them in that direction. Occasionally the impatient, exasperated voice of a fisherman would be heard above the laughter and encouraging calls. A small shark was lying upon the plank floor of the pier; a hammerhead, too large to be lifted over the rail even by the dozens of willing hands that grasped a line as soon as a shark was hooked, had been dragged through the water the whole length of the pier to the beach. A huge negro strode about to "throw shark-bait," which consisted of a chunk of meat weighing six or seven pounds. This was put on an immense hook; then, grasping the line, with a play of two or three feet to give the cast force, the negro would swing the bait about his head once, twice, thrice, and throw, hurling the meat several rods from the pier. By the time he had disposed of a bait there was usually a fisherman somewhere along the pier with his line drawn in ready for another cast. The lines used were ropes half an inch or so in diameter.

Leaning over the rail near Mrs. Payne was an eager, strong-faced fisherman who seemed oblivious of everything around. His eyes were fixed intently upon the point where his line disappeared in the water. Suddenly she felt a touch upon her shoulder. "Madam, would you like to catch a shark? Quick! quick!"

Mrs. Payne rose to her feet. One of the dark, rushing bodies was just turning upon its back, disclosing the smooth white belly. At the same moment she felt the line thrust into her hand. Every nerve in her tingled as she bent forward, grasping the taut, vibrating line. There was a swift, mighty rush, then she was almost lifted from her feet; but the fisherman's and a dozen other willing hands came to her assistance.

"A hammerhead," she heard somebody say, "and a big one! A thousand-pounder, I should judge."

"You caught it, madam," the fisherman beside her said, courteously; "there's no doubt about that. I congratulate you."

Mrs. Payne was still grasping the line, pulling in with the rest, although the part she held was now slack. Suddenly realizing the fact, she let go, laughing.

As the men moved down the pier, dragging the shark slowly toward the beach, she turned to Page, her eyes bright, her voice eager. "Was it him—Mr. Jefferson?" she asked.

Page nodded, his own eyes kindling. "It certainly was," he answered. "I have never met him off the stage before, but no one who has ever seen him or his picture can mistake Joseph Jefferson. You are to be congratulated."

"That's what I think," she said, softly; "but not for catching the shark. Rip Van Winkle was one of the delights of my young days."

The fisherman had moved a few yards down the pier, and was again looking intently at the water, waiting for the negro to bring him a new line. He had loosened his grasp upon the other, as Page had done, because of the superabundance of hands that were eager to drag the fish ashore.

During the excitement a number of new people had come upon the pier. Among them were two in wheel-chairs. These chairs had been pushed to one side, and their occupants were now coming forward to join the line along the rail. As Mrs. Payne and Page turned, they found themselves face to face with Mrs. Spencer-Browne and Dorothy.

The young girl advanced frankly, holding out her hand. "I am glad to meet you, Mr. Withrow," she said. "Have you just arrived?" Her voice was calm, but there was more color than usual in her face, more brightness in her eyes. Perhaps she remembered their meeting in the Alcazar, and felt that some apology was due him, and that she, as her aunt would not, must undertake the duty. Possibly the reason lay elsewhere.

Page grasped her hand warmly. "And I am glad to see you, Miss Dorothy," he returned, with equal frankness; "and I have not just arrived. I came a week ago, and have spent two days in getting my pineapple affair under way, and the rest of the time—that is, most of it—in sailing about the lake. But I intended to call upon you soon, in another day or two. I thought—" He did not finish the sentence, but he saw that she understood. "And—and I have been thinking, Miss Dorothy," he went on, after a short pause, "that perhaps you might like to try a sail on the lake. I have quite a commodious boat, safe and comfortable. There are a number of interesting sails—to the inlet, to Pitt's Island, down the lake to the rubber-tree, and across to some of the plantations. We might get up a party sometime."

She looked at him curiously. Page Withrow embarrassed, at a loss for words! It was almost inconceivable.

[CONTINUED ON PAGE 24]

COWS' MILK

Brings Enormous Income to the American Farmer

ITS FOOD QUALITIES

The average income from each cow throughout the United States is about $27.00 a year. In some states, notably Pennsylvania, they bring their owners an income on an average of $38.00 each a year. There are over seventeen million milch-cows in the United States, according to the last census. Of the states, Iowa has the lead with over five and one half million horned cattle. Milk is healthy and fattening when fresh and from good, healthy cattle. It is good for consumptives and those weakened by disease, the only danger being from the fact that milk affords a splendid medium for germs of typhoid fever and consumption to grow in and then infect the blood of the person drinking it. Again, the cows themselves often suffer from tuberculosis, or consumption, and this can infect the human being drinking their milk. When we come to count our chances for taking disease, however, we should not fear infection unless our blood is in disorder and our constitution run down—for all around us are the germs of disease, ready to fasten on us and grow like a parasite if we are weak to resist. The mosquito, with its bite, injects into our veins malaria, yellow fever, and other fatal troubles. The fly, with spongy feet, collects the invisible germs of diseases, spreads them over our food, and poisons us with typhoid, cholera, and other plagues of the human race.

In preparing ourselves against bacterial attacks there are many important things to be thought of—proper nourishment of the blood, nerves, lungs, heart and liver. Important to us is proper food for the stomach, pure air for the lungs, exercise and cleanliness at all times. If our stomach is "out of whack," if the blood does not get the proper nutriment out of the food eaten, we at once weaken our defensive forces, and the germs of catarrh, consumption or grip readily enter.

Dr. Pierce, the eminent physician of Buffalo, New York, says: "If each person will consider his system as an army of men which he controls as a general, and will see to its proper provisioning, and that it has plenty of ammunition in the shape of good red blood, he will be able to overcome the enemy in the shape of the germs of disease." Every healthy person has five million red blood cells or corpuscles to every square millimeter of blood. The number of red blood-corpuscles in the average human being is so great that it is almost incomprehensible. However, their numbers increase with health, or decrease with illness or malnutrition. The best tonic for increasing the red blood-corpuscles and building up healthy tissue is no doubt Dr. Pierce's Golden Medical Discovery. This medicine has been on the market for over a third of a century, and numbers its cures by the thousand.

A tonic made up largely of alcohol will shrink the corpuscles of the blood and make them weaker for resistance. A cod-liver oil makes the stomach groan, because it is irritating. What is needed is an alterative extract made of roots and herbs, without the use of alcohol, that will assist the stomach in assimilating or taking up from the food such elements as are required for the blood, also an alterative that will assist the activity of the liver and cause it to throw off the poisons in the blood. When we have accomplished this we have put the system in a fortified condition so strong that it can repel the germs of disease which we find everywhere—in the street-cars, the shops, the factories, the bedrooms, wherever many people congregate, or where sunlight and good air do not penetrate.

Many thousands of cases have been known where persons who were suffering from incipient phthisis, or the early stages of consumption, were absolutely cured by Dr. Pierce's Golden Medical Discovery. It maintains a person's nutrition by enabling him to eat, retain, digest and assimilate the proper nutritious food. It overcomes the gastric irritability and relieves indigestion, and the person is thereby saved from fever, night-sweats, headache, etc., which are so common.

"I suffered from dyspepsia over five years, during which time I tried everything we could hear of as being recommended for that trouble, but all to no avail, and I was getting worse," writes Mrs. J. H. Gernand, of 2602 Avenue G, Galveston, Texas. "Our family physician gave me medicine, but it was like taking so much water. One year before the storm of 1900 I was taken dangerously ill. Contracted a cold, and it settled in my stomach, leaving me with every description of female trouble. I had six of the best physicians in Texas attending me, and all said that I could not live one month without an operation—to which I would not submit; and as their medicine only served to make me worse, they gave me up to die. I suffered excruciating pain, and when the effect of morphine gave out I would go into convulsions. I was so sore I could not move in bed for two months, and when the last doctor gave me up, I sent, through the service of a friend, and purchased a bottle of Dr. Pierce's Favorite Prescription, also one of 'Golden Medical Discovery,' and after taking four doses I did not need any more morphine—did not feel any more pain; this result after having spent several hundred dollars in doctors' bills and medicines which gave no relief. Four bottles of your medicine have completely cured me."

"I took only four bottles of Dr. Pierce's Golden Medical Discovery and two vials of his 'Pleasant Pellets,' and these remedies did me a world of good," writes W. Walter McGloshen, of Reinbeck, Iowa. "I am thankful for your kind advice, and praise the medicines highly. Will recommend Dr. Pierce's medicines to all my friends as the best medicines ever made for the troubles for which they are recommended. There is nothing equal to them for stomach troubles."

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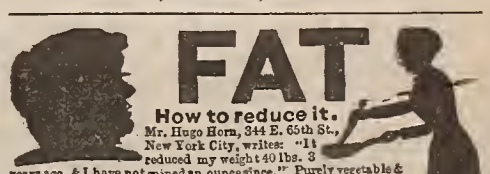

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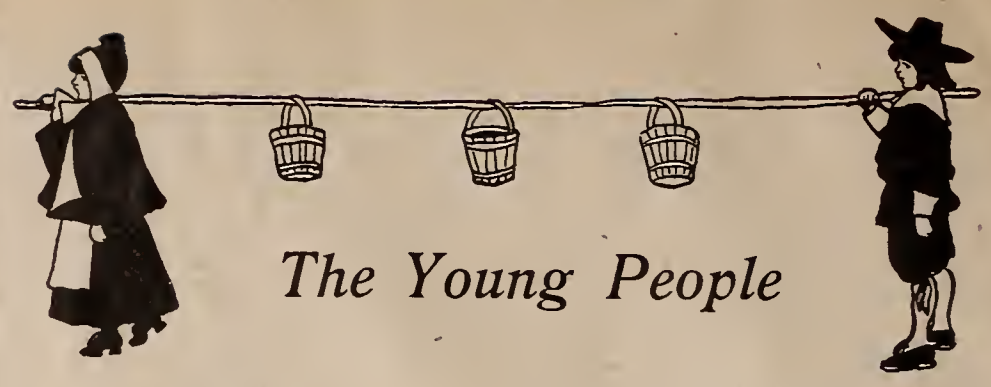


The Young People

Princess

THE STORY OF A HEN

JUST a wee bit of a baby bird, but yet so irresistibly pretty and charming that Dorothy couldn't help wishing that it would always remain as it was—a cunning little chick, all fluffiness and yellow. The tiny jet-black eyes, constantly winking and blinking, seemed like queer little sparkling beads of glass. There were sixteen brothers and sisters, but the strong family resemblance of the brood afforded but little distinction between them. Even Dorothy had despaired of ever choosing a favorite, but finally she decided on Princess. It was distinguishable from the others by a black spot between the tiny wings. It seemed as though this particular chick was just the least bit fluffier and a little more cunning and lovable. So Princess became her pet. She fed it and fondled it, and almost drove the poor mother-hen distracted by taking it away on frequent visits to the house. Here she would place it on the table, and encircling it with her arms, whisper wonderful tales from "Mother Goose." But Princess never seemed to understand or appreciate the stories, and was constantly interrupting with a plaintive little "peep."

Princess' first awakening to the great wide world occurred when the mother-hen piloted her brood across the pasture on a tour of exploration. What a wonderful world it was! There were great dense forests to penetrate that extended upward many times above her diminutive height. Perhaps, after all, it may have been only the tall grass of an ordinary field. But you must remember that Princess had the tiniest little legs imaginable. When one is barely three inches high, and weeds are over a foot above his head, it makes all the difference in the world. And then there were all sorts of insects that leaped and hopped about in a most bewildering and tantalizing way. While there seemed to be an endless number of them, they were extremely hard to catch. But now and then it happened that Princess was just the least bit quicker than the bug, and a bug is a most excellent titbit for a chick—quite as tasty as a peppermint drop to the average boy or girl.

All the time Princess was exceedingly careful to keep within hearing of the mother-hen's constant and comforting call, "cluck, cluck," which really means "come on, come on." Suddenly she espied an especially desirable bug sitting on a clover-leaf. It looked so good and tempting that she was very eager to gobble it up before it got away. She darted toward it with a quick little jump, but alas! found herself at the bottom of a deep and very dark hole. She could no longer hear her mother's call, and all her brothers and sisters had disappeared. She at once commenced to feel terribly lonely, and oh, so awfully frightened.

It was very lucky for Princess that Dorothy came along just as she did. She heard a very decided "peep, peep," right at her feet, and getting down on her knees, parted the grass above the hole. At the bottom huddled the dearest and most forlorn little chick in all the world.

"You poor little dear!" whispered Dorothy, tenderly, holding its soft, fluffy breast against her cheek. "I'll take you to your mama—you poor little lost princess!" And that was how Princess came to be named.

As Princess became older the fluffy down was replaced by stubbly feathers, and her legs grew so much faster than her body that she had a very gawky appearance. Finally Dorothy began to realize that Princess was getting a trifle too big and heavy for a little girl to carry about; in fact, had become a full-sized hen, and a very pretty one at that, with a beautifully marked feathery coat.

Quite often Dorothy took a walk down the meadow and into the field beyond. Princess was always ready to accompany her. What wonderful times they had romping and jumping through the tall grass, until it was hard to tell which was the more delighted of the two.

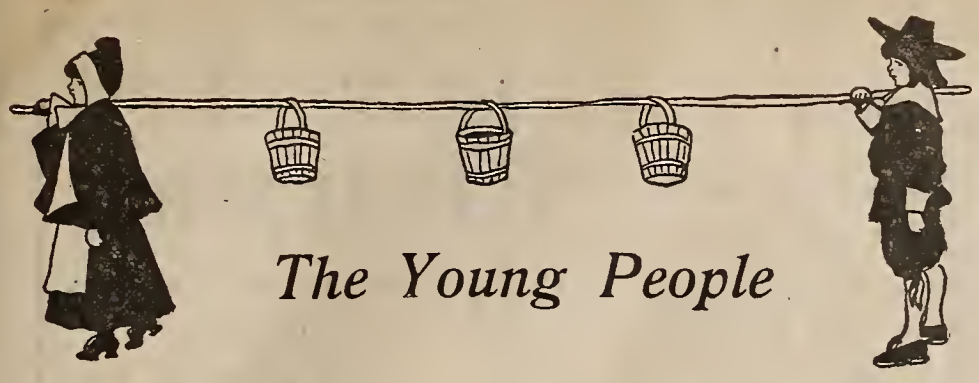
One day fifteen dainty white eggs were placed in a nest for Princess. How jealously she guarded them, and how careful she was to keep them warm both night and day for fear her babies in them might not live. A few weeks later she became the proud mother of her first brood. How contented and happy she was when she first felt their warm little bodies against her breast and under her wings.

But when she took them out for the first time they seemed to act so strangely that she began to feel greatly disappointed. They did not behave at all as she had expected. Instead of crowding around her for protection, they stalked gravely after her in single file, wiggling their funny little tails. And they had the queerest, flattest bills, and feet that were not at all like a baby chick's. And a few days later, when she took them down the meadow near the brook, every one of them ran clattering and chattering into the water, and paddled about in the most delighted fashion. Princess became terribly frightened for fear they would all be drowned. She ran frantically up and down the bank, loudly coaxing and scolding them, but it was a long while before she could get them out. Poor Princess! She was almost heartbroken. Her dear little children were only a brood of ducklings, after all.

But it wasn't long before Princess had a family all her own, and how dearly she loved them; nor was she a bit jealous when Dorothy came to play with them.

So, after all, Princess had reason to be a happy hen. H. WHITTIER FREES.

"PRINCESS"



The Young People

A New Poet

I write. He sits beside my chair
And scribbles, too, in mute delight;
He dips his pen in charmed air;
What is it he pretends to write?

He toils and toils; the paper gives
No clue to aught he thinks. What then?
His little heart is glad; he lives
The poems that he cannot pen.

Strange fancies throng that baby brain.
What grave sweet looks! What earnest eyes!
He stops—reflects—and now again
His unrecording pen he plies.

It seems a satire on myself—
These dreamy nothings scrawled in air.
This thought, this work! Oh, tricksy elf,
Wouldst drive thy father to despair?

Despair! Ah, no; the heart, the mind
Persists in hoping—schemes and strives
That there may linger with our kind
Some memory of our little lives.

Beneath his rock i' the early world
Smiling the naked hunter lay,
And sketched on horn the spear he hurled,
The urus which he made his prey.

Like him, I strive in hope my rhymes
May keep my name a little while—
O child, who knows how many times
We two have made the angels smile?
—William Canton, in The Queen (London).

"The Man from Glengarry"

TO THOSE of our readers who have not read Ralph Connor's beautiful story, "The Man from Glengarry," the following very able review will give a pleasing foretaste of its literary and moral qualities. To those who have read the book the article will be a most delightful help to memory:

"Ralph Connor writes books that teach deep moral manliness. His characters tower above the ordinary, and touch the eternal, and live above the mists. Such romance deserves wide reading; it is founded upon reality. He tells in lovely story the history of men and women who were the makers of Canada.

"'Ranald Macdonald, the man from Glengarry, is a model that young men can build after. He is manly, strong, and rich in the principles that count to-day among those who are looking for men who bring things to pass. . . .

"'In the plain church, in that virgin forest, after eight years of labor, revival clouds gathered, and there were signs of a downpour of grace. The communion season was approaching. In an old Highland congregation such times were the great feasts of the year. This custom had been transplanted to the Canadian forests. The people prepared for this communion as did the early Methodists for the quarterly meeting. On Thursday of communion week the season opened with a solemn fast. Rev. Mr. Murray was assisted by two other ministers, who preached with directness of aim, and God blessed it. Sinners sought God, and found forgiveness and peace. For eighteen months the revival went on, and many came to Christ. From this revival seven young men became ministers.

"'The people got something in that revival. It was not that Moses did not write the Pentateuch, and there were two Isaiahs, and Jonah and the whale were myths, and Solomon did not write Ecclesiastes, nor Matthew the book that bears his name. No, no! Nothing of the sort. They got Christ, and kept him, and he kept them. Through this revival, Ranald, the man from Glengarry, the prince of Canadian half-backs, passed. He opened his heart to its purifying, life-giving power, and he closed doors against sin forever. The free thinker and free liver said he had "peculiar views." "He never drank, nor played for money, never had occasion to use words in the presence of men that would be impossible before their mothers or sisters; he was a friend of the weak and helpless, the champion of women—not only of those whose sheltered lives had kept them fair and pure, but of those others as well, sad-eyed and soul-stained, the cruel sport of lustful men. For his open scorn of their callous lust some hated him, but all with true men's hearts loved him."

"'Young Merrill, who had tasted early of sin, and beneath its pang had often cried, "Pax, pax peccavi," was saved to a life of purity by this man from Glengarry. The two met by chance at a club, and Ranald inquired after his friend's morals with a manly, "Are you all right?" Merrill laid down his billiard-cue to greet his princely savior, and testified before the club-members with an enthusiasm of a class-leader of the old school, "My present magnificent manhood I owe to that dear old solemnity, Ranald."'

"I have seen Glengarry. The deep-tangled wildwood is no more. The orchard and meadow, the fields of oats and buckwheat, have taken the place of the virgin forest; but the man from Glengarry still resides there, as real as the forest that his ax mastered, directed by manliness. 'Glengarry forever!'"—Rev. T. G. Dickinson, in Western Christian Advocate.

Jemmy's Mother's Bonnet

"I want you to put jes' as many vi'lets on as you ken for twenty cents, right there in the front, so't they'll stick up an' look kind o' stylish." It was a thin, sickly-looking little boy that spoke. The young girl behind the counter smiled, but there were tears in her eyes as the grimy fingers undid the ungainly newspaper bundle, and took out a rusty black straw bonnet which had seen a great deal of service.

"It's fur my mother," he continued, "an' it's a surprise. Do you think you ken git it done fur me by the time I take my papers down to the office an' git back?"

"Oh, yes," said the girl; "only don't hurry too much. What is your name?"

"Jem," answered the boy; "an' I won't hurry. An' there's the twenty cents. I'd wait fur it a couple o' hours if I had to."

He passed out whistling cheerily. The clerk opened her shopping-bag, and taking out a bottle of shoe-polish, she began applying it vigorously to the faded straw.

"Are you really going to try to fix up that old thing?" inquired another clerk, "and take your noon-hour, too? Catch me! Why didn't you give him the violets and let him go? Twenty cents' worth—humph!"

"Indeed I am going to fix it up for the poor little fellow," was the earnest reply. "Just think, Mary, I suppose he's saved up that twenty cents for weeks! I'm so glad I happened to get this blacking this morning. You can't tell the bonnet when I get through with it; see if you can!"

She hummed a happy little song as she put on coat after coat, deftly turning the straw up here and down there.

"Mrs. Brown," she said, as the proprietress of the store entered, "will you give me thirty-five cents' worth of violets at wholesale? A poor little boy has brought me his mother's bonnet to trim, and I want to add a few violets to what he has ordered, and make it just as pretty as I can."

"Indeed I will," the proprietress answered, "and good measure at that!" And so it came about that the poor black bonnet was transformed into a beautiful "shiny" one, with bunches of violets peeping out here and there from the ribbons so cunningly arranged that the worn, faded parts could hardly be discerned.

"Oh, you don't mean it; you don't mean that's my mother's bunnit, and all fur twenty cents!" exclaimed Jem, coming back just as the finishing-touch was being given. "Oh, what lots o' vi'lets! How did you git it so shiny? Oh, she'll be jes' tickled to death!"

As the door closed behind him, one who had been a silent spectator of it all went up to the young girl, and laying her hand on her shoulder, said, "This has been a lesson to me, my dear—a lesson that I can never forget. Out of the abundance with which the Lord has blessed me I have begrudged to the poor and needy within my gate. Please God, it shall never happen again!"

In her simple way the girl pondered upon the woman's words, and wondered what her life had been and what it would be. Ah, who can say? As the circles of a pool into which a pebble has been cast widen and widen until the ripples reach beyond our sight, so the influence of a noble, generous act, though one the world might call small, goes on through all eternity.—Our Boys and Girls.

THE VALUE OF CHARCOAL

FEW PEOPLE KNOW HOW USEFUL IT IS IN PRESERVING HEALTH AND BEAUTY

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature, but few realize its value when taken into the human system for the same cleansing purpose.

Charcoal is a remedy that the more you take of it the better; it is not a drug at all, but simply absorbs the gases and impurities always present in the stomach and intestines, and carries them out of the system.

Charcoal sweetens the breath after smoking, drinking, or after eating onions and other odorous vegetables.

Charcoal effectually clears and improves the complexion, it whitens the teeth, and further acts as a natural and eminently safe cathartic.

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A Buffalo physician, in speaking of the benefits of charcoal, says: "I advise Stuart's Absorbent Lozenges to all patients suffering from gas in stomach and bowels, and to clear the complexion and purify the breath, mouth and throat; I also believe the liver is greatly benefited by the daily use of them; they cost but twenty-five cents a box at drug-stores, and although in some sense a patent preparation, yet I believe I get more and better charcoal in Stuart's Absorbent Lozenges than in any of the ordinary charcoal tablets."

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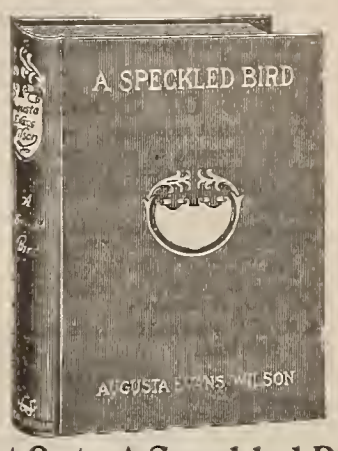

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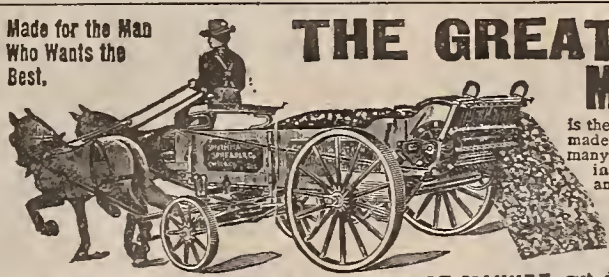

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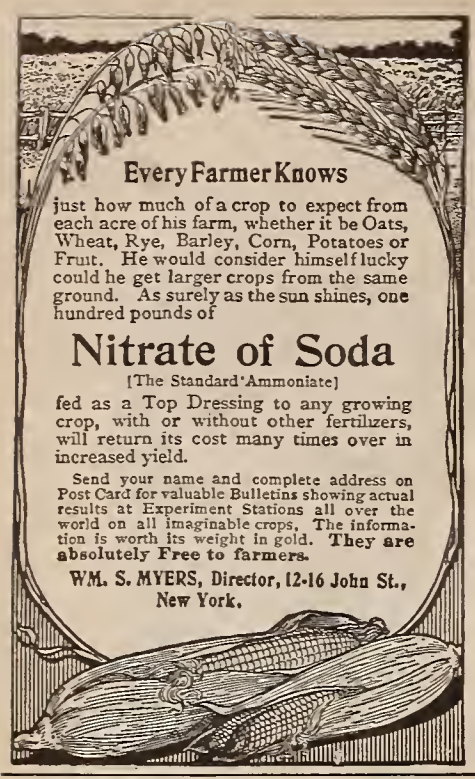

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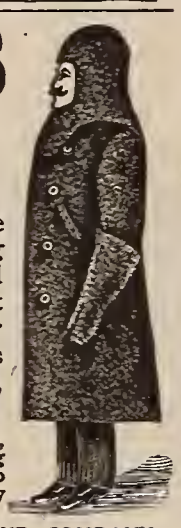

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Wit and Humor

Uncle Joe Forgot to Remember

THERE was a conference at the White House. Leading Republican senators and representatives were there. When they came out, about midnight, a dozen reporters surrounded them to get the news. No one would talk, but the reporters persisted.

At length Speaker Cannon backed into a corner, and said, "Boys, I'd like to tell you, but I have drunk so much apollinaris in there that I can't remember. It is a curious thing," he continued, reflectively, "that those mineral waters you get in the White House make me forget to remember exactly what you boys want me to remember not to forget."—Saturday Evening Post.

A Round of Pleasure

The philanthropic lady sat in the midst of the McFadden family, expostulating with them in a pained voice on the frequency with which they chased "the festive can" around the corner to the nearest liquor saloon.

"You ought to provide some kind of wholesome amusement for your family," said the philanthropic lady, sternly, to the abashed McFadden. "You should do something to lighten the burden of living. Every life needs a little sunshine in it."

"Oh, missus," spoke up Miss McFadden, aged thirteen, eagerly, "we has plenty o' fun. There's always a fight or something entertainin' goin' on in the tinimint. Why, oney last week a gentleman cut a lady's throat an' drug her past our door."—Lippincott's Magazine.

His Mistake

Two Highlanders, being in Glasgow for the first time, were having a walk through the city. Turning a corner, they were much surprised to see a water-cart wetting the street. Not having seen anything of the kind before, Tougal, under a mistaken idea, ran after the cart, and cried to the driver, "Hey, mon—hey, mon, yer losin' a' yer water!"

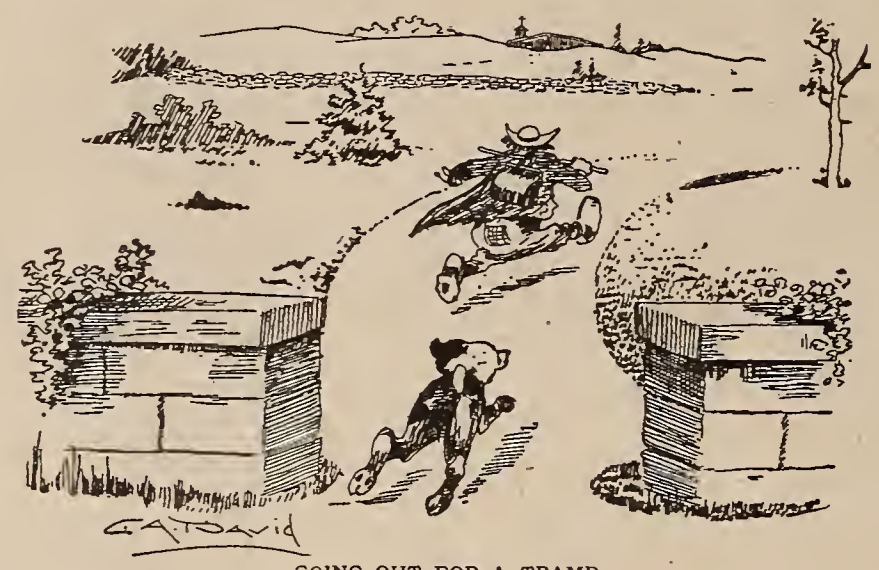
His friend, annoyed at Tougal's want of knowledge, ran after him, caught him by the arm, and said, rather testily, "Tougal, mon, Tougal, dinna be showin' yer ignorance. It's to keep the laddies off the back o' the cairt."—Argonaut.

The Last Straw

It was Saturday night, and owing to the temporary absence of his wife, it fell to Mr. Brown to attend to the usual process of giving his eight-year-old son a bath and putting him to bed. He had left his evening paper with a man's reluctance, and had hurried matters along with more speed than the little chap was accustomed to. However, he endured it all without a protest until it came to the prayer. It was his habit after "Now I lay me" to ask the divine blessing upon a long list of relatives and friends, calling each by name.

"Please, God," he began, "bless papa and mama, grandpa and grandma and Aunt Edith and Uncle George, and—" A pause. His father, thinking to curtail the list of beneficiaries, softly insinuated an "amen." Not heeding the interruption, the little supplicant drew a long breath, and continued, "And Aunt Alice and Cousin Annie, and—and—" Again his father said "amen."

This was more than flesh and blood could stand, and lifting his little head, he exclaimed, with tears of indignation, "Papa, who's running this prayer, you or me?"—Harper's Magazine.



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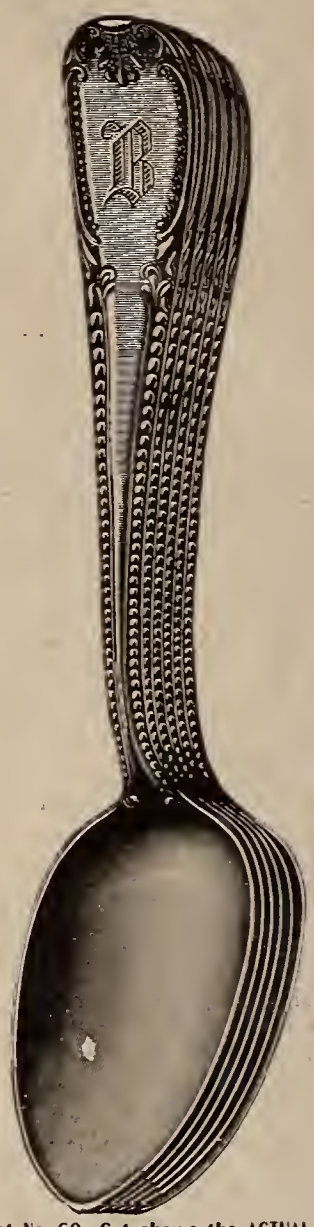


Set No. 60—Cut shows the ACTUAL SIZE

Nickel-Silver Base The base of this ware is solid nickel silver, which is white all the way through, positively will not change color nor rust, and will wear for a lifetime. It is the highest grade known, being full twenty-five-per-cent nickel.

Coin-Silver Plate On top of this nickel-silver base is plated the full STANDARD amount of pure coin-silver. This combination makes a ware which we guarantee to give satisfaction. Test it, and if not found exactly as described, return it to us and we will refund the money.

Initial Letter Each spoon is engraved free of charge with an initial letter in Old English. Only one letter on a piece. Be sure to name the initial desired.

Pattern We have the spoons in two beautiful patterns, No. 60 and No. 14. You can make your choice of pattern. Where no choice is named we will fill orders with our selection. We also reserve the privilege of substituting one pattern for the other if the supply in any particular initial is exhausted. We can thus fill all orders the same day they reach us. It is impossible to describe the beauty of these spoons, and the illustration falls far short of conveying a full idea of their attractiveness. In finish they are perfect, and will render complete satisfaction.

GUARANTEE

We absolutely guarantee every piece of this ware to be exactly as it is described and to give entire satisfaction or your money will be cheerfully refunded. We are sure it will please you.

(When this offer is accepted no cash commission can be allowed, and the name cannot count in a club toward a premium)

POSTAGE PAID BY US IN EACH CASE

Address

FARM AND FIRESIDE
Springfield, Ohio

Wit and Humor

His Explanation

During a lull in the bathing demands on a certain trans-Atlantic liner, George, the youth who had charge of the bath-rooms used by the saloon-passengers, decided to take a bath, so he locked himself in one of the rooms used by the men. Suddenly he was disturbed by a rap at the door, and heard a woman's voice, "Honey! Honey! Are you there?" No reply coming from the room, the lady repeated the interrogation.

As an explanation was needed, George spoke. "Beg your pardon, lady, but this ain't no bee-hive; this is a bath-room."—Argonaut.

How the Bishop Was Cured

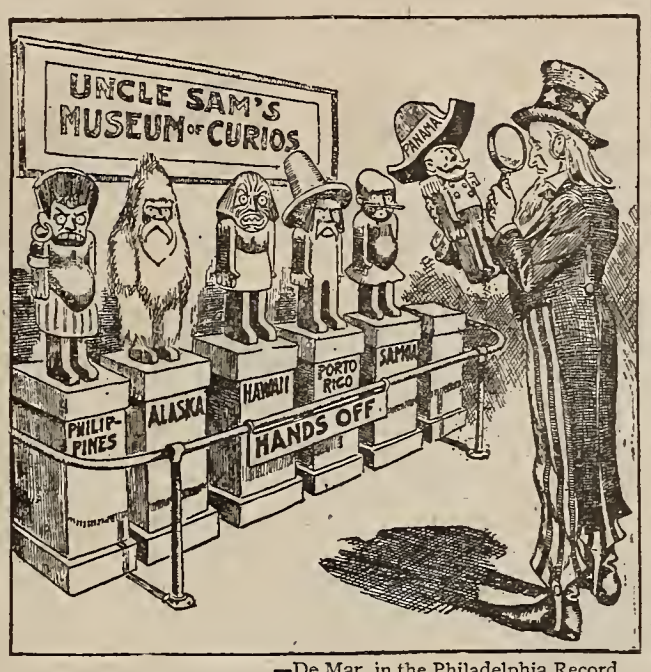
A writer in "Harper's Weekly" reports an amusing new anecdote which Bishop Potter tells on himself. "When one has lived for years in America without any special title in ordinary conversation," says the Bishop, "it is not easy to become accustomed to being hailed as 'my lord' whenever any service is rendered. During my various trips to Europe I found it impossible to go anywhere or do anything without being 'lorded' right and left. At last I was in a fair way of becoming spoiled, when a little occurrence mercifully delivered me. I had reached home after a run abroad, and while descending the gang-plank met a friend, an old vestryman of mine. He was hurrying on board to receive his wife and daughters. Pausing midway up the plank, he grasped my hand, and shouted, 'Hello, Bish! How are you?'"

The Retort Courteous

The pulpit steps of the kirk in Morebattle, a little town in Scotland—and there were as many as twenty leading to the high platform from which the minister preached—were occupied each Sabbath by the deaf old women of the parish, who knew their Scripture as well as the minister himself. One of these pious old persons was wont to interrupt the minister's wanderings by citing his authority for each and every quotation.

"That's frae Paley's Evidences," she would say, and "ye got that oot o' the Concordance," or "That's frae the Lamentations o' Jeremiah," until the exasperated minister could stand her interference no longer, and exclaimed, with much irritation, "I wish you'd hold your tongue, you meddling old woman!"

With her equanimity in no wise disturbed, the old soul nodded her head wisely, and replied, "Aye, sir, that's yersel'."—Leslie's Monthly.



—De Mar, in the Philadelphia Record.

"I WONDER IF I OUGHT TO PUT IT IN MY COLLECTION"

His Use for It

Grandpa—"Why do you study grammar?"

Willie—"So I can laugh when people make mistakes."—Detroit Free Press.

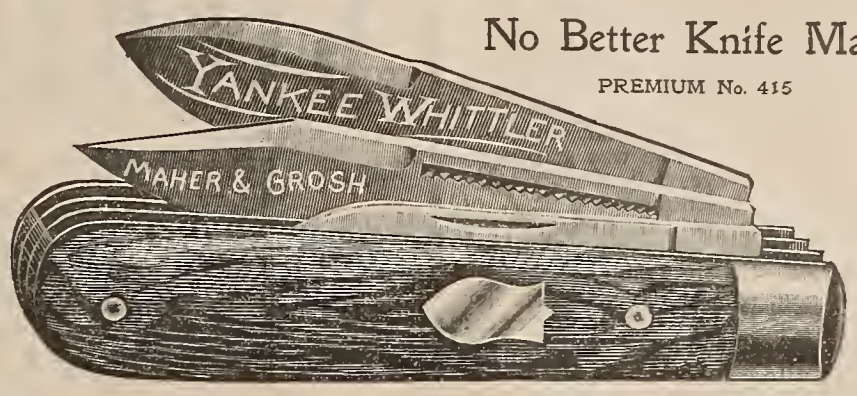
A HARD ONE

"Ethel rubbed it in on Tom when she sent him back the engagement-ring."
"How?"
"She sent it back in a box marked 'Glass—Handle with Care.'"

A Fine Knife

No Better Knife Made

PREMIUM No. 415



We illustrate herewith a three-bladed knife which is known as the "Yankee Whittler," and it is a fine knife for general purposes. The blades are of the very best steel, hand-forged, and carefully tempered the same as a razor-blade. It has good solid handles, nicely trimmed, and it is one of the most serviceable knives we have ever offered; warranted by the manufacturers to give the best of satisfaction and to carry a keen edge.

This "Yankee Whittler" Knife will be given FREE to any one for a club of FIVE yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents a year.

This "Yankee Whittler" Knife, and the Farm and Fireside ONE year, sent to any address for only $1.00.

(To Club-Raisers:—When the subscriber pays you this special price you are entitled either to the regular cash commission or to count the name in a club.)

Holdfast Clothes-Line Tie

EASILY RELEASED

PREMIUM No. 499

There is nothing to compare with the Holdfast. Everybody uses wash-lines. Lines put up and tied as easily as a hat can be hung on a hook. Once fastened, it will remain so until otherwise desired. Each in a paper package; weight three ounces.

This Holdfast Clothes-Line Tie will be given FREE to any one for a club of TWO yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents a year.

This Holdfast Clothes-Line Tie, and the Farm and Fireside ONE year, sent to any address for only 40 cents.

(To Club-Raisers:—When the subscriber pays you this special price you are entitled either to the regular cash commission or to count the name in a club.)

High-Grade Nickel-Plated Scissors

SEVEN-INCH SCISSORS

PREMIUM No. 147

Literally thousands of these scissors have been used by us without a single complaint. They are seven inches long, heavily nickel-plated and highly polished; the steel is the very best, and the cutting-edges are ground with the utmost care. Sent by mail, post-paid.

These Scissors will be given FREE to any one for a club of FIVE yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents a year.

These Scissors, and the Farm and Fireside ONE year, sent to any address for only 70 cents.

(To Club-Raisers:—When the subscriber pays you this special price you are entitled either to the regular cash commission or to count the name in a club.)

Family Dial-Scale

PREMIUM No. 486

A scale without weights. Never the worry and bother of hunting for a mislaid weight. Always ready instantly to weigh your provisions, your groceries, or anything about your house. The scale is constructed entirely of steel, with enameled dial. It weighs by ounces up to twenty-four pounds. It is perfectly simple in construction, nothing to get out of order. Whether you buy or sell, it is indispensable—a reliable, ever-ready friend that you ought not to be without.

Each scale sent by express from Chicago, Ill., charges paid by the receiver. Shipping-weight about eight pounds.

This Family Dial-Scale will be given FREE to any one for a club of SIX yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents a year.

This Family Dial-Scale, and the Farm and Fireside ONE year, sent to any address for only $1.25.

(To Club-Raisers:—When the subscriber pays you this special price you are entitled either to the regular cash commission or to count the name in a club.)

FREE—Our New Premium List

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO

Comrades of Travel

[CONTINUED FROM PAGE 19]

What did it mean? Then she said, "I shall be pleased to go any time you like."

There was a sudden smothered exclamation beside them, and they turned quickly. It came from Mrs. Spencer-Browne. They thought it was meant for them. But no, she was not looking at them. She did not even seem conscious of Page's presence. She was staring at Mrs. Payne, her eyes full of wondering recognition, of resentment, of fear, of another emotion which perhaps she wished to conceal, for her eyes opened and shut several times rapidly, as though trying to hold something in. Once her lips moved, as though she would speak; then she turned suddenly, and walked to the opposite rail, and gazed out across the water.

Mrs. Payne did not even glance toward Mrs. Spencer-Browne. Her gaze was wistfully, hungrily, almost fearfully, fixed upon Dorothy, as though she might be a vision that would slip away. She recovered herself by a strong effort. "You must pardon me, dear," she said, gently; "I did not realize that I was staring at you so. But you remind me of some one I used to know, but who is dead. Isn't it beautiful out here?"

"But you must pardon me first," interrupted Page, impetuously. "How stupid of me! Mrs. Payne, let me introduce Miss Dorothy Hamilton. I forgot that you had never met each other."

The ladies bowed and smiled, Dorothy with pleased cordiality, Mrs. Payne with the wondering wistfulness returning to her face.

"Dorothy," she said, softly; "that was her name, too. How strange! But I am glad. It seems right that two so beautiful and so much alike should have the same name. My dear!"

She held out her hand, and Dorothy, who had been gazing at the tender, reminiscent face with something stirring in her own heart, suddenly caught the hand in both of hers. For a moment they stood thus; then the girl bent forward, and kissed her companion on the cheek.

"There," she cried, half laughing, half apologetically, "if you don't want to be kissed you mustn't look like that. I couldn't help it, really. You seem like somebody I've known all my life. And your eyes," her voice softening, "are just like my mother's used to look. You don't mind?"

"Mind! My dear!" The words were repeated tenderly, tremulously. "I cannot tell you how I like it. And I have known you longer than you think. I saw you in the car coming down, and when we changed trains at Jacksonville, and one morning you passed my boarding-place on a bicycle, and—and I have dreamed of you. But I am very glad to be introduced. It makes you seem more real and tangible. Are you going to remain here long?"

"Most of the winter, I think."

"Then perhaps we may see quite a good deal of each other. My self-appointed watchman here," nodding whimsically toward Page, "will hardly allow me to go into the house long enough to get my meals. If he had his way I believe he would have a little thatch roof built, and make me sleep and take my meals under it, so that I could never get away from his inexorable open air."

"You see, it's like this," explained Page, gravely. "I'm under a mental contract to restore Mrs. Payne to her husband with all the improvements that he could possibly anticipate; and the fact that the contract is self-imposed only makes it the more binding. I am seriously considering the advisability of taking her pulse morning, noon and night, looking at her tongue, and perhaps ordering mild stimulants with her meals. However," reflectively, "such extreme measures may be unnecessary. So far she is keeping up nobly to expectations, and I have every reason to believe the contract will be fulfilled. The only essential thing that I can think of now is good companionship—to keep her mind occupied, you know. And—er—can I depend on your help, Miss Dorothy? Will you join us on the lake to-morrow?"

"Why, yes, I think so," Dorothy laughingly replied. "At what time?"

"As soon as convenient after breakfast."

"Dorothy!" called Mrs. Spencer-Browne, harshly, "we will go now."

Dorothy turned quickly. Her aunt was standing by the wheel-chairs. As they went back down the pier she waited in momentary expectation of an outburst, but it did not come. Her aunt had apparently forgotten her presence, and was lost in thought.

A little later Page and Mrs. Payne followed them. As they arrived in front of the Inn, two figures came down the walk toward them. One was Mr. Burley. As he saw the other, Page stepped forward with an exclamation of pleasure. "Harry Thornton!" he cried. "When did you arrive?"

[TO BE CONTINUED]

$100.00 for a Name

WE WILL GIVE $100.00 IN CASH to the person who suggests the most appropriate name for our beautiful new picture, illustrated on this page. Any one ordering one of the pictures, together with a subscription to the FARM AND FIRESIDE, will be allowed to suggest one name.

We have referred to this picture heretofore as "The Chrysanthemum Girl," but we have decided that the picture deserves a better name, and we will pay $100.00 for it. Can you win the $100.00? See offers below.

$25.00 Extra for Quick Work

If the name the committee adopts is sent during this month (January), we will pay the person suggesting the name $25.00 additional to the above $100.00.

Reduced Illustration Size, 20 by 30 Inches

Our New Prize Picture

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. It is fresh from the artist's brush, and never before offered to the public, so that the FARM AND FIRESIDE readers have the first opportunity to secure a copy.

The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. Order as No. 54.

A LARGE GOLD FRAME

If you will notice the illustration you will see that the artist has displayed more than the usual amount of genius. He has painted a wide gilt border, in exact imitation of a gold frame, so that *a frame is not needed*. It has the full appearance of a handsome gold frame three inches in width. All that is necessary is to fasten the four corners to the wall with pins, and it will have the full effect of a magnificent picture in a heavy gold frame. It is quite proper at the present time to hang works of art without frames. However, this picture can be framed if you so desire.

SIZE

The size of this magnificent new work of art is about 20 by 30 inches, which makes a large and elegant wall-decoration. The cut on this page is greatly reduced in size.

TEN COLORS

The colors and tints, the lights and shadows that the artist uses in his make-up of this work of art create one of the most striking and exquisite pictures of its kind that we have ever seen. The artist has employed no less than ten of the most delicate and beautiful colors and gold in his creation of this charming work of art. **This picture is actually worth $1.00.**

THE SUBJECT

of this exquisite painting is that of a beautiful young woman wearing a gorgeous heavy lace-over-silk dress, making one of the prettiest and most expensive gowns ever produced. In her hair she wears a diamond crescent, and about her neck a costly pearl-and-diamond necklace. She is standing among beautiful chrysanthemums, which tend to produce a most delicate and pleasing effect. Altogether it is one of the most beautiful paintings of its kind ever produced, and we are sure that all who receive it will be more than pleased with it.

AN IMPARTIAL COMMITTEE will be appointed to choose from among the names that which they believe to be the most appropriate. The person suggesting the name which the committee adopts will receive $100.00 in cash.

The Contest Closes April 1, 1904

Ways to Get the $100.00 Prize

1st We will send one copy of this magnificent new picture, together with a whole year's subscription to the FARM AND FIRESIDE, new or renewal, and allow you to suggest one name for the picture, for only 40 cents.

2d You can accept any offer in our paper which includes a year's subscription to the FARM AND FIRESIDE, and add 10 cents extra for one of these pictures, and be entitled to suggest one name for the picture.

3d For One Dollar we will send three yearly subscriptions to the FARM AND FIRESIDE (regular clubbing rate is 35 cents each), and three pictures, and you will be entitled to suggest three different names for the picture. The papers and pictures can go to different addresses.

We will pay agents, canvassers and club-raisers a handsome cash commission to take orders, in connection with yearly subscriptions to the FARM AND FIRESIDE, for this beautiful picture that needs no frame.

I suggest as the name of the picture _____

_____

Name of Sender _____

Post-office _____

County _____ *State* _____

Send your order for the paper and the picture (No. 54) on a separate sheet of paper. If you send more than one name, write the others on separate pieces of paper about 3 by 4 inches, with your name and address written thereon.

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO

For Singers and Speakers

The New Remedy for Catarrh is Very Valuable

A Grand Rapids gentleman who represents a prominent manufacturing concern, and travels through central and southern Michigan, relates the following regarding the new catarrh cure. He says:

"After suffering from catarrh of the head, throat and stomach for several years, I heard of Stuart's Catarrh Tablets quite accidentally, and, like everything else, I immediately bought a package, and was decidedly surprised at the immediate relief it afforded me, and still more to find a complete cure after several weeks' use.

"I have a little son who sings in a boys' choir in one of our prominent churches, and he is greatly troubled with hoarseness and throat weakness, and on my return home from a trip I gave him a few of the tablets one Sunday morning when he had complained of hoarseness. He was delighted with their effect, removing all huskiness in a few minutes, and making the voice clear and strong.

"As the tablets are very pleasant to the taste, I had no difficulty in persuading him to use them regularly.

"Our family physician told us they were an antiseptic preparation of undoubted merit, and that he himself had no hesitation in using and recommending Stuart's Catarrh Tablets for any form of catarrh.

"I have since met many public speakers and professional singers who use them constantly. A prominent Detroit lawyer told me that Stuart's Catarrh Tablets kept his throat in fine shape during the most trying weather, and that he had long since discarded the use of cheap lozenges and troches on the advice of his physician that they contained so much tolu, potash and opium as to render their use a danger to health."

Stuart's Catarrh Tablets are large, pleasant-tasting lozenges composed of catarrhal antiseptics, like Red Gum, Blood Root, etc., and sold by druggists everywhere at 50 cents for full treatment.

They act upon the blood and mucous membrane, and their composition and remarkable success has won the approval of physicians, as well as thousands of sufferers from nasal catarrh, throat troubles and catarrh of stomach.

A little book on treatment of catarrh mailed free by addressing F. A. Stuart Co., Marshall, Mich.

DEAFNESS Cured at Home

Dr. W. O. Coffee, the famous aurist, has discovered a simple treatment of mild remedies that cures at the patient's home, ***deafness, head noises, catarrhal deafness,*** catarrh of the head, nose and throat. Eradicates catarrhal poison in every case.

64-page Deaf Book FREE

Explains all about Dr. Coffee's method and how he cures deafness **without operations.**

This book tells how he restored his own hearing after being pronounced incurable by the best doctors in the United States and shows how thousands of deaf people are having their hearing restored by this simple home treatment. He sends this book to every person afflicted with deafness or any disease of the ear, nose or throat, FREE. Write today and ask for **book on deafness.** Write

DR. COFFEE

DR. W. O. COFFEE, 819 Good Block, Des Moines. Ia.

Cancer and Tumor Permanently Cured with Soothing, Balmy Oils

No pain. No scar. No experiment. Dr. D. M. Bye's thirty years of success stamps him the master specialist of the day. Convincing evidence in his new book, which will be sent free on request. Address Dr. D. M. Bye Co., Drawer 505, Dept. Z, Indianapolis, Ind.

WANTED Reliable men in every locality to introduce our goods, tacking up show-cards on trees, along roads and conspicuous places, also distributing small advertising matter. Commission or salary $60.00 per month and expenses not over $2.50 per day. Steady employment to good men. No experience needed. Write for particulars. EMPIRE MEDICINE COMPANY, Buffalo, N. Y.

1427 Silk Fringe Cards, Love, Transparent, Escort & Acquaintance Cards, New Puzzles, New Games, Premium Articles, &c. Finest Sample Book of Visiting & Hidden Name Cards, Biggest Catalogue. Send 2c. stamp for all. OHIO CARD CO., CADIZ, OHIO. **CARDS**

The Family Physician

By R. B. HOUSE, M.D.

Slaves to the Teacup

DR. PARKE BLAKE, a Boston physician, points out that there are thirty thousand women in the New England capital who are slaves to the teacup. "Everywhere," says Doctor Blake, "one finds the kettle and the teacups. The habit has spread to the high-school girls, and it is ruining not only their complexion, but their health, digestion and brain-power. So there are various kinds of intemperance, and alcoholism is not the only evil under the sun."

Railway Fatalities and Injuries in the United States

Figures recently published by the Interstate Commerce Commission for the quarter and year ended June 30, 1903, show that accidents during the three months resulted in 230 deaths and 2,629 injured, against 300 and 2,834 respectively in 1902. For the twelve months, 3,554 persons were killed and 45,477 injured, compared with 2,819 killed and 39,800 injured in 1902. Statistics on railway accidents gathered and published by the Commission during the past fifteen years show that over 100,000 persons have been killed and more than 615,000 injured.

A Tuberculosis Farm

The tuberculosis farm of the Denver Association Health Farm was opened May 1st. The aim of the farm is to provide a sanitary home, with nutritious food and pleasant occupation, for persons of small means who are in need of the restorative influence of the Colorado climate. The association farm consists of ninety-four acres—a thirty-four-acre fruit-farm, the gift of Mr. and Mrs. David Brothers, and a sixty-acre ranch. The present equipment includes a brick house for the office, the superintendent's residence, parlor, dining-room, kitchens, cellars for one thousand barrels of apples, stables, and a group of cottage-tents for the guests of the farm. Only one resident will occupy each tent. The first contribution (five dollars) to the fund for the maintenance of the farm was made by Dr. Edward P. George, of Hanover, Germany.—The Sanitarian.

A Child's Health Indicated by Its Weight

The weight of a growing child is the most important index of its general health. The standard of weight for growing children usually given by authorities in the matter is that at five years of age a child should weigh as many pounds as it is inches high. As a rule this will not be much over or under forty pounds. Children who come of large parents should weigh something more than that. The rate of increase should be about two pounds for every inch of growth, with a tendency for the weight to exceed this standard rather than to fall below it. When a child is heavier in proportion to its height than this standard, it is a sign of good health. If the child is growing rapidly, it should not be allowed to fall much below it without being made to rest more than has been the custom. A deficiency of weight in proportion to height is always an unfavorable sign. Any interruption in the progress of increase of weight, especially while growth continues, is a danger-signal that should not be neglected by those interested in the child.

Experiments with Concentrated Foods

Prof. Russell H. Chittenden, director of the Sheffield Scientific School at Yale, will begin experiments to prove that people to-day consume more food than is needful, and that such overeating is harmful. The War Department will coöperate with the Sheffield laboratory in a physiological study of the minimum amount of proteid and albuminous food required for the maintenance of health and strength under ordinary conditions of life. In carrying out this purpose twenty men have been detailed from the hospital corps of the army.

The investigation will be continued during some nine months. There will be no special theories involved, and no special systems of dietetics, but the object specially aimed at is to ascertain experimentally whether physiological economy in diet cannot be practised with distinct betterment to the body and without loss of strength and vigor. There is apparently no question that people ordinarily consume much more food than there is any real necessity for, and that this excess of food is in the long run detrimental to health and defeats the very object aimed at. It is with a view to gathering as many facts as possible on this subject that the study in question is undertaken.

RHEUMATISM Cured Through the Feet

Thousands Are Cured at Home Every Month by MAGIC FOOT DRAFTS. Why Not YOU?

Try Them—FREE

The Drafts cured Mrs. W. D. Harriman, wife of Judge Harriman, of Ann Arbor, Mich.

They cured H. C. Van Valkenburg, Providence, R. I., of an intensely painful case of muscular rheumatism.

They cured severe rheumatism of the arms, neck and back for T. C. Pendleton, Jackson, Mich.

Mrs. Caspar Yahrsdorfer, Jackson, Mich., 70 years old, was cured in a few weeks after suffering 30 years.

The Drafts cured James Gilbert, Locomotive Dept., Mich. Cent. R. R., Jackson, Mich., after 27 years of pain.

Dr. Van Vleck, Jackson, Mich., writes that they cured him, and he is now using them in his practice.

They have cured hundreds of cases probably just like yours. Isn't the chance worth taking? You try them free. Send us your name. We will send you by return mail a pair of Magic Foot Drafts—prepaid. If you are satisfied with the comfort they give you, send us One Dollar. If not, you send us nothing. **You decide.** Magic Foot Drafts are worn without the least inconvenience, and cure rheumatism in every part of the body by stimulating expulsion of acid poisons through the great foot pores. Splendid booklet, illustrated in colors, free with the trial Drafts. Don't suffer, but write to-day to the Magic Foot Draft Co., F. N. 2 Oliver Bldg., Jackson, Mich.

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Eczema, Salt Rheum, Pimples, Ringworm, Itch, Acne, or other skin troubles, can be promptly cured by

Hydrozone

Hydrozone is endorsed by leading physicians. It is absolutely harmless, yet most powerful healing agent. Hydrozone destroys parasites which cause these diseases. Take no substitute and see that every bottle bears my signature.

Trial Size, 25 Cents.

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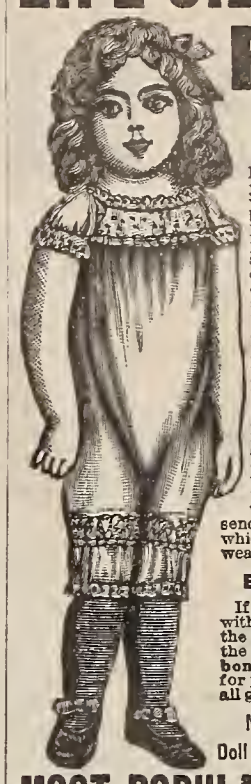
Prof. Charles Marchand 59=M Prince St. New York.

FREE {Booklet on the rational treatment of diseases sent free.

$3 a Day Sure Send us your address and we will show you how to make $3 a day absolutely sure; we furnish the work and teach you free, you work in the locality where you live. Send us your address and we will explain the business fully, remember we guarantee a clear profit of $3 for every day's work, absolutely sure. Write at once. ROYAL MANUFACTURING CO., Box 1048. Detroit, Mich.

LIFE SIZE DOLL FREE



2½ Feet High.

Girls, here is a Great Big Doll; big enough to wear your outgrown baby dresses, which you can put on and off, button and unbutton, to your heart's desire. It is the most popular doll made. Dollie has an indestructible head, golden hair, rosy cheeks, brown eyes, kid colored body, red stockings, black shoes, and will stand alone. It is an exact reproduction of a hand painted French Doll and will live in your memory long after childhood days have passed. We will give this beautiful doll absolutely Free as a premium for selling only four boxes of our Great Cold and Headache Tablets at 25 cents a box. Write today and we will send Tablets by mail postpaid. When sold send us the money ($1.00) and we will send you this **Life Size Doll** which is **2½ feet high,** and can wear baby's clothes.

EXTRA PREMIUM.

If you send us the money within one week after receiving the Tablets, we will send with the doll, **six Gold plated Ribbon Pins,** as an extra premium for prompt work. We take back all goods not sold. Address,

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MOST POPULAR DOLL MADE

What You Are Looking For!

Honorable business methods combined with the highest professional attainments. Graduate of Columbia Univ., N. Y., and 3 of best Hospitals. 17 years' experience. Try my CORRESPONDENCE TREATMENT in Diseases of

THE SKIN and BLOOD

No fee until cured. Medicines $3 to $5 per mo., exp. paid. Particulars for your name and address.

DR. F. A. VOTEY, Specialist, 17 W. Bridge Street, Grand Rapids, Mich.

TWO RINGS FREE!

Sell 12 Boxes **GEM BREATH PERFUME** at 10c. a box. Send us the money **$1.20** and we give you **FREE** these two **Solid Gold laid Rings,** one set with dark Emerald and two brilliants, the other with Twin Garnets divided by three pearls. No money wanted till goods are sold. We take back all not sold. Your friends buy them. Extra present with each box.

GLOBE GEM CO., PROVIDENCE, R. I.

BIG PAYING BUSINESS For MEN, WOMEN.

Write for names of hundreds of delighted customers. Make $30 to $50 weekly. Do business at home or traveling, all or spare time, selling Gray outfits and doing genuine gold, silver, nickle and metal plating on Watches, Jewelry, Tableware, Bicycles, all metal goods. Heavy plate. No experience, quickly learned. Enormous demand. No toys or humbug. Outfits all sizes. Everything guaranteed. Let us start you. We teach you FREE. Write today. H. GRAY & CO., CINCINNATI, O.

Free Gold Watch

This fully warranted Solid Gold Plated Watch, equal in appearance to a $35.00 Gold Filled Watch warranted 20 years, is given FREE to Boys and Girls or anyone for selling 20 pieces of our handsome jewelry at 10c. each. Send your address and we will send the jewelry postpaid, when sold send us the $2 and we will positively send you the watch, also a chain for quick work. ☞ Write to-day. BOND JEWELRY CO., DEPT. 36 CHICAGO.

MAGIC LANTERNS STEREOPTICONS and Moving Picture Machines. Write and we will tell you how to give entertainments that PAY. Catalogue FREE.

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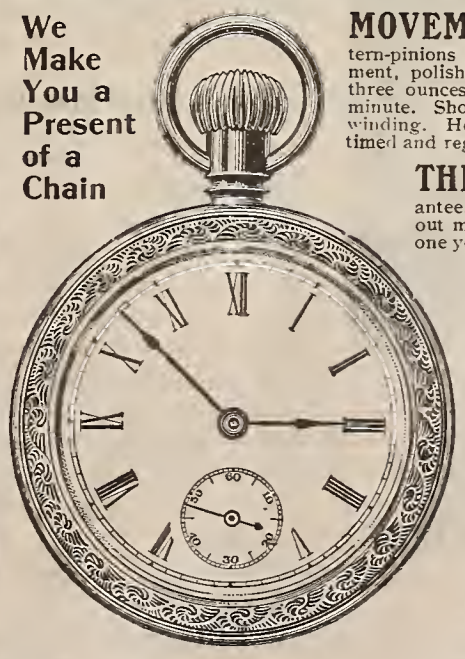
A BEAUTIFUL SOLID GOLD FILLED RING to any one sending us the names and P. O. addresses of 25 unmarried men, ages 17 to 25, good health. Send size of finger. W. F. AGENCY, Lock Box 214, Jackson, Michigan

This Watch FREE

We Make You a Present of a Chain



MOVEMENT Regular sixteen-size and only three eighths of an inch in thickness. Lantern-pinions (smallest ever made). American lever escapement, polished spring. Weight, complete with case, only three ounces; quick-train, two hundred and forty beats a minute. Short wind; runs thirty to thirty-six hours with one winding. Heavy bevel crystal. Bezel snaps on. Tested, timed and regulated. This watch guaranteed by the maker.

THE GUARANTEE In every watch will be found a printed guarantee, by which the manufacturers agree that if without misuse the watch fails to keep good time within one year, they will, upon its return to them, with five cents for postage, repair it free of charge, and return it.

Description—Plain Center Band, Elegant Nickel Case, Snap Back, Roman Dial, Stem-Wind, Stem-Set, Medium Size, Oxidized Movement-Plate, Open-Face.

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Do you want to get this watch?

If so, **send us your name and address on a postal=card to=day,** and ask for a book of six coupons, and say you want the watch. We will send by return mail a receipt-book containing six receipts, each one of which is good for a year's subscription to the FARM AND FIRESIDE, one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself. You sell these receipts to your friends and neighbors at 35 cents each. They will gladly take advantage of a chance to get a good paper one year for 35 cents. When the receipts are sold, you send the money to us, and we will send you the watch. **Hundreds have earned watches by our plan, and you can do it in one day's time. Write to=day. Be sure to ask for a book of six coupons.**

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and Farm and Fireside one year for only 40 cents

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Repeating Air-Rifle Free

SHOOTS 300 TIMES WITH ONE LOADING

A TRUE SHOOTER THE IDEAL GUN FOR BOYS

Boys have use for it every minute—hunting in the woods, shooting at targets, drilling as soldiers, and hundreds of uses that only boys know about.

Harmless, strong, durable, shoots accurately, and cultivates trueness of sight and evenness of nerve.

It is extremely simple in construction. Any child can operate it and become an expert marksman with little practice.

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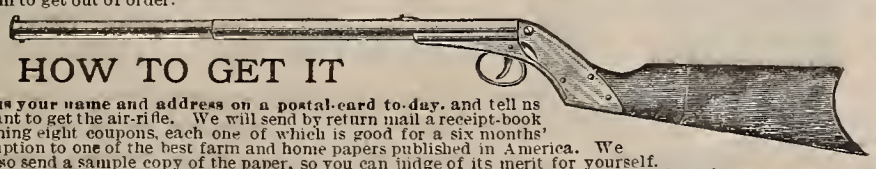

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Send us your name and address on a postal-card to-day, and tell us you want to get the air-rifle. We will send by return mail a receipt-book containing eight coupons, each one of which is good for a six months' subscription to one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself.

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Similar patterns retail in fashion bazaars and stores at 20 cents each, but in order to introduce the FARM AND FIRESIDE into thousands of new homes, and to make it more valuable than ever to our regular patrons, we offer our line of stylish patterns to the lady readers of our paper for the low price of only ***10 Cents Each.***

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Satisfaction guaranteed or money refunded.

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Special price of each pattern 10 cents.

Postage one cent EXTRA on skirt, tea-gown and other heavy patterns.

Send for our Pattern Catalogue. We design and cut our own patterns

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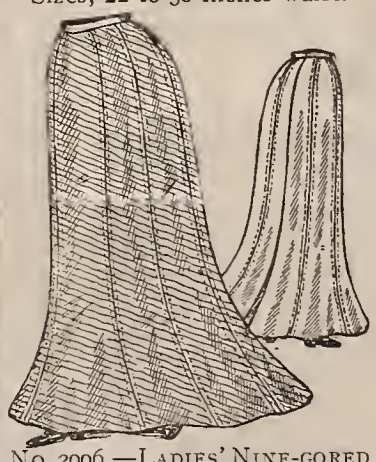

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It is the constant saving and steady stream of pleasant business relations which makes our patrons eager to speak a good word for us at every opportunity.

Our prices are 15 to 50 per cent below regular retail figures.

We Want You to Try Us

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125 Crockery and Glassware
130 Cutlery
135 Dry Goods
140 Fancy and Novelty Goods
145 Farm Implements
150 Fishing tackle
155 Popularpriced Furniture
160 Harness
165 Jewelry
170 Kitchen Supplies
175 Laces, Embroideries, Ribbons, Trimmings
180 Lamps and Lanterns
185 Linoleums, Carpets and Curtains
190 Men's Hats and Gloves
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205 Music and Musical Instruments
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245 Underwear
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D Dairy Supplies
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J Telephones and Electrical Goods
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M Books
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T Trunks
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Mackintosh Catalogue
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It also contains freight rates, full instructions for ordering, and tells you everything you might want to know about us.

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Send four 2-cent stamps for our **10 Color Wall Hanger** showing the inside of this building, with the goods and the clerks at work. One of the most complex and complicated pieces of lithography ever attempted. Very interesting and attractive. You can get it for what it cost us—four 2c stamps.

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Complete satisfaction or money refunded without question.

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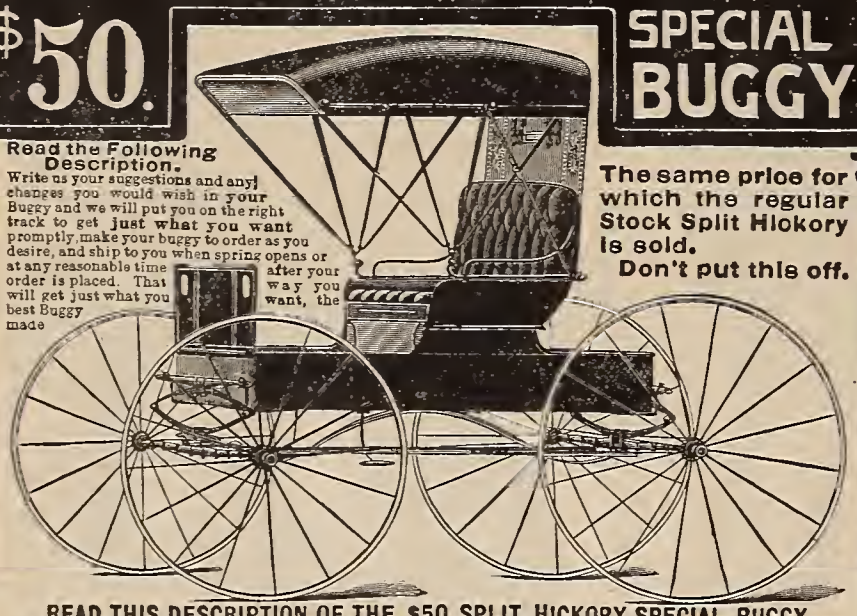
$50. SPECIAL BUGGY



Read the Following Description.

Write us your suggestions and any changes you would wish in your Buggy and we will put you on the right track to get **just what you want** promptly, make your buggy to order as you desire, and ship to you when spring opens or at any reasonable time after your order is placed. That way you will get just what you want, the best Buggy made

The same price for which the regular Stock Split Hickory is sold. Don't put this off.

READ THIS DESCRIPTION OF THE $50 SPLIT HICKORY SPECIAL BUGGY.

Wheels—Sarven patent, 38 and 42 inches high or higher if wanted. Tire ⅝ inch by ¼ inch thick, round edge. **Axles**—Long distance, dust proof, with cemented axle beds. **Springs**—Oil tempered, graded and graduated, 8 and 4 leaf. Wooden Spring Bar furnished regularly, Bailey Loop if preferred. **Upholstering**—Finest quality 16 oz. imported all wool broadcloth cushion and back. Spring cushion and solid panel spring back. **Top**—Genuine No. 1 enameled leather quarters with heavy waterproof rubber roof and back curtain, lined and reinforced. **Painting**—Wheels, gear wood, body and all wood work carried 100 days in pure oil and lead. 16 coats of paint with the very highest grade of finishing varnish. Gear painted any color desired. Body plain black with or without any striping.

This buggy is furnished complete with good, high padded, patent leather dash, fine quality, full length carpet, side curtains, storm apron, quick shifting shaft couplings, full leathered shafts with 36 inch point leathers, special heel braces and corner braces. Longitudinal Center Spring.

Any reasonable changes can be made in the finish and construction of this Buggy. We make it to suit the customer's taste, and guarantee it to please, no matter what the requirements are.

30 DAYS' FREE TRIAL allowed on Split Hickory Vehicles for you to test them thoroughly in every way. A positive 2 years' guarantee given with every one. This is a plain business proposition between business men. Our reputation is established by many years of honorable dealing with buggy users direct and you are assured of a square deal when you accept our proposition. Send for our Free 136-page Catalogue of Split Hickory Vehicles and Harness.

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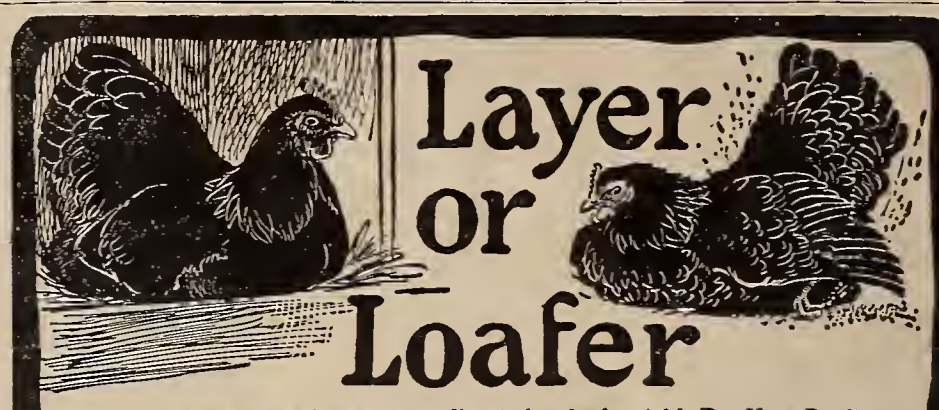
NOTE: We carry a full line of high-grade Harness sold direct to the user at wholesale prices.



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A hen is a layer or a loafer, according to her feed. Add Dr. Hess Poultry Pan-a-ce-a to her regular daily ration and she will at once show better condition, and begin to lay regularly—making a showing that will astonish you. Dr. Hess Poultry Pan-a-ce-a is guaranteed to cure cholera, roup, indigestion and the like, and costs but a penny a day for 30 fowls. It is a doctor's prescription for improving the organs of digestion and compelling the rapid conversion of the food into eggs, muscle, bone, feathers, etc.

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is the only poultry compound with a scientific origin—made by a regular graduate of medical and veterinary colleges, and sold on a written guarantee. It is a tonic; not a stimulant; its action is positive, safe, rapid and permanent. 1½ lb. package, 25c; 5 lbs. 60c; 12 lbs. $1.25; 25 lb. pail, $2.50 (except in Canada and on Pacific Slope).

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It is guaranteed to destroy lice on poultry and stock of all kinds, ticks on sheep; and is a powder put up in round cans with perforated top—much more convenient to apply than liquids. Price, 1 lb. 25c.; 3 lbs. 60c. If your dealer can't supply you write us.

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Manufacturers of Dr. Hess Stock Food.

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requires little time and labor if you use Enterprise machines; $8.50 buys an outfit with sufficient capacity for any family butchering. An

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makes a combination that is unequaled for quality or quantity of work performed. A No. 10 Meat Chopper has a capacity of three pounds of meat per minute, and a No. 25, four quart size, Sausage Stuffer handles the meat as fast as it comes from the Chopper. The **Cylinder** of the Stuffer is **bored true** so that no meat can work up above the Plate; the patented **Corrugated Spout** prevents air entering the casings; with special attachments the Stuffer is easily converted into a perfect **Lard Press.** The Chopper chops quickly, uniformly, perfectly; won't clog, break or rust. Enterprise machines last a life-time. The name "ENTERPRISE" is on every machine as a guarantee of its quality. **Sold by all hardware and general stores.** Write for **free catalogue** of household helps, and send 4 cents for the "ENTERPRISING HOUSEKEEPER," containing 200 receipts.

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Vol. XXVII. No. 9 WESTERN EDITION FEBRUARY 1, 1904 TERMS { 50 CENTS A YEAR 24 NUMBERS

Pruning an Apple Orchard

By C. M. GINTHER

PROBABLY no part of the work about an apple orchard is so little understood as is pruning. There are more things to be considered than merely thinning out the branches or lopping them off. It is believed that few persons really study the various questions that render pruning an essential operation. It is the custom of too many growers to merely thin out and lop off without heeding the weightier considerations that give to the operation its significance and utility. While growers of apples in various parts of the country will disagree upon the instrumentality of the process in producing good crops, and possibly no two will agree in all points, the question may be resolved into one of results that are known to arise from its effects in one remarkably successful orchard. The orchard owned by Deolen Daugherty, in Wayne County, Indiana, is an object-lesson for all growers. This orchard is located outside the favored limits of the region popularly named the "fruit belt," and its continued success after twenty years of constant bearing, without a single failure, is at least an evidence of the value of the system of pruning adopted by the owner.

The history of this orchard furnishes encouragement for that large class of persons whose zeal in the cause of apple culture leads them to purchase every year new stock from the nurseries to replace apparently thrifty trees that have proved hopelessly barren. Mr. Daugherty used the experience of his neighbors in selecting the site for his orchard. He visited many of them twenty years ago, when he made up his mind to engage in apple culture as a business enterprise. He not only examined the trees in the orchards near his home, but went beneath the surface, and made a careful study of the soil in which the most successful orchards were planted. He became convinced that apple-trees required a peculiar form of subsoil formation—one that would catch and retain the moisture that filtered through the surface-soil. With that idea in view, he made extensive borings on his own farm, and finally selected a tract of twenty acres of yellow clay loam overlying a limestone substructure, which latter, while not entirely impervious to water, was regarded as sufficiently so to serve the purpose. After using the same care in selecting the varieties that he had used in selecting the site, Mr. Daugherty plowed up the tract, and put it in the best possible condition with harrow and roller. The trees were set thirty-three feet apart, and between every two apple-trees, all over the orchard, a peach-tree was set. This proved satisfactory and profitable. The peach-trees bore plentiful crops every year until the apple-trees became of such size as to claim the space occupied by the former, when they were removed. The primary idea was to grow apples; but as the apple-trees did not require all the space, it was a thrifty notion to set peach-trees in the spaces between the apple-trees.

The orchard was set out in the spring, and corn was planted and cultivated there the first year. The second, third and fourth years clover was sown, and left to fall on the ground. This was to enrich the soil and afford a mulch. The fifth year blue-grass was sown, and when it had secured a fast foothold, sheep and hogs—the latter with rings in their noses, to prevent rooting—were turned in to pasture.

The peach-trees were permitted to bear as soon as possible, but every apple-bloom was removed until the trees reached the age of five years. The fifth year there was a fine crop of bloom on the apple-trees, and Mr. Daugherty instituted a system of spraying, among the first in Indiana. He made a solution of four pounds of Paris green to forty gallons of water, and with a small force-pump and spray-nozzle he thoroughly drenched the trees just as the bloom was all but ready to fall off. Two weeks afterward he repeated the process. The result was a fine crop of perfect fruit. Every year since then the trees have been sprayed in exactly the same manner, except that to the Paris-green solution there has been added in recent years four pounds of sulphate of copper and four pounds of lime. This latter solution Mr. Daugherty regards as the best that can be applied to apple-trees. There has never been a failure in this orchard, and for the last ten years the yield has been from three thousand to five thousand bushels of marketable fruit every year. It has been found necessary to go about over the orchard every year and remove much of the fruit that appeared, to prevent overbearing. This is regarded as essential, and is recommended to growers who observe the trees apparently too full.

Mr. Daugherty believes that the hogs and sheep have destroyed countless numbers of the incipient codling-moth. The animals devour all the unsound fruit that falls to the ground, and in so doing destroy the germs of the codling-moth within the fruit. When it is seen that the sheep will rear up to get the apples on the lower limbs, the animals are taken out until after the crop is removed. By this and by spraying Mr. Daugherty believes that he has almost exterminated the codling-moth in his orchard. Nevertheless, he continues every year the system of spraying, and also turns the sheep and swine into his orchard for the purpose named.

SHOWING THRIFTY APPEARANCE OF TREES AFTER FIFTEEN YEARS

IDEAL GROWTH OF LOWER LIMBS—EFFECT OF PRUNING

While the foregoing is not without value in tending to produce satisfactory crops, it is in pruning that this grower mainly relies for abundant yields. Briefly, his system first contemplates the encouragement of lower-branch growth. All over his orchard there is noticeable an almost abnormal growth of lower branches, many of them sweeping to and resting upon the ground when they are laden with fruit. The object is more than threefold. First, it is known that the lower branches are the strongest and most vigorous, being closest to the root-supply. It is designed to have these lower branches produce the greater part of the fruit grown upon the tree, and observation justifies the expectation, for actually more than half the fruit hangs upon these lower branches. A wide-spreading, drooping growth of lower branches is encouraged, secondly, for the reason that the foliage in summer protects the ground from the burning rays of the sun, insuring a cool, damp condition of soil about the base of the tree, and in winter protecting the ground similarly from the extreme cold that always comes in winter. Further, the lower branches drop their leaves directly underneath; and while these leaves do not always remain there all winter, it is observed that there is always a good quantity of them remaining in the spring. The effect of this is twofold. The leaves protect the roots in winter from extreme frosts, and form a mulch about the base of the tree.

These notions are not chimerical, but for fifteen years the effects have been observed in summer and in winter as described. As a still further reason for encouraging lower-branch growth, it facilitates the gathering of the fruit. A man standing on the ground is able to gather the greater part of the apples on the tree, thereby economizing not alone in time, but in the more careful handling of the fruit. Again, possible damage to the tree occasioned by a man clinging to the branches while gathering the most of the crop is obviated, and fewer broken limbs result from thrusting ladders among the branches. In gathering a crop amounting to thousands of bushels every year, the saving of time alone is an important factor, but it is by no means urged as the first in value. The secondary branches—that is, those above the lower branches—are pruned with the idea of giving a symmetrical shape to the tree, which should be as nearly as possible a true cone, as well as so shaping them that the largest amount of sunlight may be admitted to all parts of the tree itself without impairing the best bearing proclivity. It is well known that fruit that ripens in a dense shade will have a duller hue than will that ripened in the sunshine. This and the idea of retaining or encouraging the symmetrical growth govern the pruning of the upper branches.

As to the best time for pruning, it has been found advisable to do it as soon in the autumn after the leaves have fallen as possible. Any time during the winter will do, but Mr. Daugherty reasons—and wisely, too—that better work will be done if the weather is suitable for outdoor work than when rigid weather conditions require strenuous exertion to keep warm. Too fast work is usually imperfect work, and for that reason this orchard is pruned immediately after the leaves have fallen in the autumn.

In fifteen years this orchard has never failed to produce a full crop but once, and then a late frost in the spring killed the bloom that had set on apparently as thickly as any year in the orchard's history.

[CONCLUDED ON PAGE 3]

FARM AND FIRESIDE

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Mr. Greiner Says:

THE GREAT SCARCITY of reliable farm labor is responsible for the suggestion offered recently by suffering farmers that our immigration laws be so amended that, with other nationalities, the Chinaman will also be welcomed to our shores. The Chinese are reported to be faithful and careful workers. If our industrial conditions do not change before long, especially in regard to the labor market, this idea of bringing Chinese labor to the relief of the labor-short farmer must soon find plenty of adherents.

MUCK LANDS, when thoroughly drained, frequently make veritable garden spots. But unless the tile-lines are laid with sufficient fall, preferably into the clay subsoil, and carefully covered, the soft muck is liable to soon clog them. We have found that a little extra care in attending to these points will pay exceedingly well, and prolong the period of usefulness of the drains for years. The life of a drain carelessly laid in muck is very short. It is often advisable to put boards both under and on top of the tiles.

ABOUT COWS AND MILK.—Some of the Eastern milk-farmers are reported to be reducing the number of their cows. That is an example which might well be followed by a very large number of farmers all over the country. The fact is that too many cows are kept for the good of the owner. These "too many" cows are the poor ones which do not pay for their keep, and they constitute a rather large proportion of the cows now on our farms. The best cow makes the cheapest milk; and for the farmer who produces milk as a business, the first consideration must be to make it as cheaply as possible. A cent saved in the production of a quart of milk is a big item, and it can be done by keeping the best cows and selling the poorer ones. A really good cow should not be for sale at any price. Prof. Geo. A. Smith, dairy expert at the Geneva (N. Y.) Experiment Station, gave a talk on the dairy business before the Niagara Farmers' Club a few days ago, referring to the cow as an animated machine, and to the food as the raw material to be fed into that machine for certain purposes. There is no sentiment about all this—it is strictly a business proposition. To succeed, we must have a perfect machine and the best raw materials that can be had. Every cow, says Professor Smith, is just as good as her inheritance, her food and care will make her. She can't be any better. She need not be a thoroughbred. There is a great difference in individuals, both among thoroughbreds and common stock. We find Jerseys that are not worth keeping, and often you will find so-called scrubs that are good producers and profitable. But unless we keep the right cows and have a love for the business we will not be liable to succeed. At the Geneva station one cow gave ten thousand pounds of milk, making four hundred and forty-three pounds of butter, in forty-six weeks. This cow made money for her owner. One two-year-old heifer gave six thousand pounds of milk, or three hundred and fifty pounds of butter, in the course of a year. Such cows are worth keeping. None but a fool would sell them in order to secure the difference between the price of them and the price of poor ones. Mate the good cows with a thoroughbred sire of a good producing family. Continuing thus, and using the proper raw materials (food), you will be on the highroad to success.

FEEDING COWS FOR MILK.—Feeding for milk is a comparatively simple matter, and yet an unsolved problem for the great mass of farmers. It seems a hard task to get the latter over the notion that corn is the food "par excellence." Corn is good in its place, and good for many purposes. It will make an animal fat, and keep it warm in these excessively cold days; but it will not make milk, and will not bring fat into the milk, at least as a rule. Corn is an excellent thing in one sense, and a great blessing; but it is also a great curse when depended upon as a general food, and the cause of untold sickness, suffering and death to thousands of cattle and horses. I don't believe I state this too strongly, either. Professor Smith, at our club-meeting in Niagara Falls, called timothy and corn a wrong combination—one with which you can "fill up an animal without feeding it." A cow that gives thirty pounds of milk a day needs one pound of albumen (protein, the blood-and-muscle-forming element) to put into this milk, besides what she needs for her own growth and sustenance. She can't get this amount of albumen out of all the corn and timothy that she can hold. She can't eat and digest enough of such food to get her needs in albumen. Corn has about the least proportion of albumen (protein) of any of our common food materials. Oats has considerable more, wheat bran still more. Next higher in that scale stands gluten feed, then brewers' grains, then malt sprouts, then distillers' grains, then linseed-meal, and finally cotton-seed meal. Alfalfa has about fifteen per cent of protein—even more than red clover, which has a little over twelve per cent—and is nearly a balanced ration and a perfect food. A ton of wheat bran contains about eleven dollars and fifty cents' worth of protein, nineteen dollars and eighty cents' worth of oil-meal, and twenty-three dollars and fifty cents' worth of cotton-seed meal. The combination which I have fed to my horses and cows for years, and which has given me the greatest satisfaction, considering price and effect, is based mostly on the addition of wheat bran and oil-meal to cut and moistened corn fodder and mixed hay. This is a safe way of feeding. It gives healthy animals and plenty of milk. The business dairyman, of course, uses silage in place of my dry corn fodder.

TRASH IN FICTION.—In my younger days I used to be, at least at one time, a great reader. I took to history, stories of what really happened, and to fiction, with equal relish. With many people novel-reading has become almost a passion. I do not deny that fiction in novels, etc., can be made wholesome reading, or even a powerful agency for shaping and molding public opinion. For instance, think of "Uncle Tom's Cabin," which is one of the books of fiction that have actually made history. We have had many novels written for the very purpose of aiding human progress by educating the masses. But on the other hand, what a lot of trash is found among the fiction stories, even in Sunday-school literature! Whatever in these books is unnatural, untruthful, is harmful, and fails of its legitimate purpose, which is to educate and improve the mind and morals of the reader. Most of our modern novels are the veriest trash. This will appear to the reader most strikingly in the shafts of sarcasm which Victor Roville, one of our well-informed newspaper men, directs against this style of literature. When asked by a lady reader why he did not use his talents for writing a novel, he replied, "I fear that I would make a poor fist at writing a novel. In the first place, I never met a real live duke in all my life, and only one lord, so it is readily seen that I would be horribly handicapped at the outset. I am totally unfamiliar with the minute niceties of society talk, and if I attempted to quote French I would probably perpetrate an Irish bull; and you know that no English or American novel is fit to read if it has not a liberal sprinkling of the language of 'la belle France.' It makes no difference that the reader cannot translate it—it must be there just the same if the author would please a public that likes to be given credit for a greater fund of information than it possesses. Then, too, I am ignorant of the ways of swelldom, with which the great public, of course, is perfectly familiar. I never even had cold game-pie for breakfast, or toasted truffles for tea, and no novel-writer can hope to please his feminine readers if he omits such important details as those. I have never been presented at court. . . . I never saved a millionaire's beautiful and only daughter from incineration on the ninth floor of a fire-proof hotel, nor even from the clutch of the surf at Newport or Coney Island. I never tracked a villain with unceasing vigilance around the world by the peculiar odor of his cigars. I never stood behind a bunch of magnolias in a conservatory and heard the details of a dastardly plot discussed by conspirators in evening dress just the other side of the fountain." And people will devour just such trash dished up in the modern novel.

Mr. Grundy Says:

CATALPA FOR THE ROADSIDE.—Several persons wrote me late last autumn asking about catalpa for a roadside tree. Some were thinking about planting it for ornament, shade and posts along the highways adjoining their farms. I deferred answering them until now, because they are very apt to lose the paper containing the answer, forget what I wrote, and finally write me again for a personal letter. Now that the time is at hand for ordering trees from the nurseries, I think a reply will be in good season.

In the first place, I do not think it advisable to plant many trees along the highway, because they prevent the road from drying after rains. This is not the case when planted along the north side of the road, but when planted on the south, east or west side. If one wishes to plant trees along the south side of a road, he should set them at least thirty feet apart. At this distance apart they will do no harm. They should be the same distance apart when set along the east or west side. Along the north side they may be set ten feet apart without detriment to the road.

In setting trees along a highway, one should first know whether or not a telephone-wire is likely to be run along that highway. If it is, it would be better to plant the trees somewhere else, for they must make room for the wire, and it is aggravating to have trees that one has cared for several years hacked and mutilated. Then he should learn what the laws are relating to trees growing along the highway in his locality. In many parts of the country trees planted along the highways are supposed to be donated to the public by the planter, and after he has planted them they pass out of his control. In the long run, I think it will be more satisfactory to the planter to plant his trees where he can retain control of them.

PLANT TREES.—I would advise all farmers to plant trees, and to plant them in groves on the rough spots and in the corners. There are very few farms that have not a rough spot or a sharp corner somewhere about them, and these will return the largest profit planted to forest-trees that will make good posts and fire-wood. I am well satisfied that it will pay every farmer, and pay him well, to plant a wind-break about his house and yards. I would willingly pay a thousand dollars more for a farm with a good wind-break around the house and yards than for one equally good, but without the wind-break. I would save the thousand dollars in fuel, feed and general comfort the first five years. The first place I lived on was exposed to every blast that came along, and every year I had outbuildings turned over or broken to kindling, haystacks scattered, fodder blown away, and lots of aggravating damage done, while a neighbor who lived behind a grove of maples, willows and cottonwoods did not have even a chicken-coop turned over. My home is protected from the north and west winds by fruit-trees and spruces, cedars and arborvitæs, and we do not notice high winds. No matter how hard the north or west wind is blowing, my wife hangs out the washing, and it is not harmed in the least. One can go about attending to the feeding and other chores in comfort. I can carry a bucket full of water without having it blown on my legs, and a bunch of hay without having it blown off the fork.

SHELTER BELT.—C. S. S., Iowa, says his house is placed in the northwest corner of his farm, about fifty feet from the line, and there is no room to plant a wind-break grove on the north and west sides. He asks what I would do under the circumstances. I would plant a row of red cedars just inside the line, and do it the coming spring. I would obtain trees three feet in height if I could afford the price, and set them six feet apart. I would dig or plow the soil at least eighteen inches deep, pulverize it well, and set the trees about six inches deeper than they stood in the nursery. After I got the roots covered, I would tamp the soil down on them firmly, then cover with loose soil, and finish by mulching with any coarse material eight inches to a foot deep. The mulch should extend at least four feet from the trees, and six feet is better. Keep the weeds out, and mulch heavily again the following spring. The secret of success with evergreens lies mainly in keeping the roots damp all the time, and the soil in which they stand moist all through the growing-season. If my finances would not stand three-foot trees, I would take eighteen to twenty-four inch size. With first-class care they will make rapid growth.

I once saw a farm-house protected from the north and west winds by a single row of Norway spruce. The row was set twenty-two feet from the west side of the house, so the owner told me, and in front it was thirty feet from the house. The trees made an evergreen wall nearly forty feet high that effectually checked the severe winds from those quarters. The owner said that no money would tempt him to cut them down, though he sometimes wished the west row was about thirty feet further from the house.

L. J. T., Illinois, says her home is fully exposed to the west winds, which come across a wide valley, and strike with all the fury imaginable the hill on which she lives. She desires to plant a shelter belt of several rows of trees that will get up and protect her home at the earliest possible moment, and would like to learn what I would plant. I would plant a mixture—soft maple, cottonwood, walnut, catalpa, speciosa and white ash. The rows should be ten or twelve feet apart, and each variety set in a row by itself. The entire west row should be cottonwood. It is a rapid grower, rough and hardy. Six feet apart is a good distance to plant them. White ash would be all right for the second row, then walnut, catalpa and maple. But I would plant not less than twenty rows—the two west rows cottonwood, and the others alternately as given above, all six feet apart in the rows. With thorough cultivation they would begin to be effective in about five years. When they reach a height of about forty feet their value can scarcely be overestimated. As they become crowded, the smaller and weaker ones can be cut out and made into fire-wood.

Six years ago a FARM AND FIRESIDE reader in Iowa wrote me for advice about planting a wind-break. Said he: "I came here from a wooded section of Indiana, and it seems to me that I'll be blown off the earth before I get fairly anchored. I want a shelter belt of trees that will grow ten feet a year, if you know of such. Please advise me, or my wife will go back to her pa's, and I will be left alone to chase chicken-coops, buckets, pans and boards that go cantering across the fields about once a month." I told him to plant cottonwood and soft maple six feet apart in rows ten feet apart, and cultivate well until they were fifteen feet high. Last fall I received a letter from him stating that he is still in the same old place, and that his wife is with him, and everything is lovely. The shelter belt he planted has stopped the howling blasts from sweeping his premises of things that are not staked down, and his wife has not lost any of her washing for two years. His shelter belt begins twenty feet from the house, and extends outward two hundred feet, and he says he would not take a thousand dollars for it. It is a quarter of a mile long, and shelters house, yards and stock-buildings, and is a thing of beauty and a continual joy. I never have known a man to plant a shelter belt who was not more than glad he did it.

All Over the Farm

Farm Theory and Practice

KEEPING PLANTS GROWING.—When I was a boy the farmers talked about "resting" the land. Now, the fact is that Nature knows nothing about resting when work can be done. If the soil is not locked up by frost or water it is trying to produce something—not for its owner, but for its own benefit. When land is "worn out," as we term it, there is constant effort on its part to cover itself with some sort of vegetation. Its business is to produce, and if it has half a chance it will grow for itself a mulch that will protect it, and it will fill itself with plant-roots to take up and preserve its available fertility. What land usually needs is not "rest," but a chance to add to its store of organic matter and to shade itself. Idleness means the absence of living roots, so that fertility may leach or wash away, and it means loss by exposure. It is good farming to keep some crop growing the most of the time, but it is bad farming to rob the land of all its product unless we return in its stead a good supply of organic material in manure. If manure is not given freely, then some of the product of the soil besides the roots of the plants—some one of the crops that will add humus or part of it—should be left on the ground every two or three years or oftener. It is humus, not "rest," that the worn-out land is in need of.

RED CLOVER WITH OATS.—When seeding to wheat or oats it is a common practice to plant for clover to follow. The tendency of clover to fail to make a good sod is increasing, and it is a discouraging fact. Oats is a more unsatisfactory crop than wheat with which to seed clover, and this is due to several reasons. A quick-growing crop monopolizes the available fertility more completely than a slower one, like winter wheat. Oats is a crop that rapidly uses up the water-supply in the soil. The shading of the surface is more dense than in the case of wheat, giving the clover-plants less chance to be made hardy by exposure to the sunshine and hot air. The harvest comes later, prolonging the period in which the clover gets little moisture.

Oftentimes, however, this is the only available grain crop with which to seed, especially where winter wheat is not profitable in northern latitudes. When stands of clover are difficult to get in the oats, one of two things must be done: Seed the oats less thickly, so that the shade will be less dense and the supply of water in the soil will be greater, or make the oats into hay early, saving the exhaustion of soil-water that occurs during the maturing of the oat crop, giving the clover exposure to light and air before the season is so far advanced.

HANDLING MANURE.—In the hilly sections of the country many farmers are slow to accept the usual teaching that stable manure should be drawn to the fields as fast as made, and scattered over the surface. The questions often come up at the institutes: Does not some of the strength of the manure go into the air when left on the surface of the ground? and, Is there not great danger of loss from washing by heavy rains? The first question is easily answered. Of the three valuable fertilizing elements in stable manure two are minerals, and of course they cannot pass into the air. The third element cannot escape into the air unless the manure lies in a pile so that it can ferment. There can be no considerable loss of manure by exposure to the air on the surface of the field. As to the danger of having the fertility carried down the hill by rains when the surface is frozen, I must say that it seems to me great enough to prevent hauling from the barn when there is any glare of ice that forms a sort of roof to the land. One should use good judgment. If the ground is frozen hard under the snow, there is some danger. However, it should be borne in mind that for every dollar's worth of manure that may be lost by the practice of drawing manure and scattering it as fast as it is made, there is doubtless one hundred dollars' worth lost by heating and leaching in piles at barns. If all manure were to be drawn to the fields and spread as fast as it is made, the fertility of our farms would be far greater than it is.

BUYING FERTILITY.—The man who is so situated that he can use purchased protein feeding-stuffs profitably is able to enrich his land in the cheapest way possible. When he is buying bran, middlings, etc., he is getting the elements we purchase in a commercial fertilizer—nitrogen, phosphoric acid and potash. Stable manure is a variable quantity, so far as actual value is concerned. The character of the food largely determines the character of the manure. When concentrated foods are used, the manure is rich. The protein foods that are rich in mineral matter—as bran, for example—bring to the farm relatively large quantities of such fertility as a good commercial fertilizer contains. If these foods can be used with profit in feeding, the fertilizer is gotten without cost. The direct manurial value of some protein feeds is as great as their selling price, or rather would be if they were available in the ground and needed in the proportion found and capable of even distribution like commercial fertilizers. While these conditions are not met, and one fourth of the fertility may be taken out by the stock, we can see how rapidly a farm may be built up in this way if the manure is carefully saved and evenly spread upon the ground. The man who buys feed for stock is buying fertility. DAVID.

The Relation of Science to the Farmer

Why do so many farmers dislike to be classed as scientific or "book" farmers? A few generations ago there was some excuse for looking with considerable distrust on the then crude experiments and cruder theories of the earlier students who were delving for the secrets of Nature's laboratory; but now, though there is still much to learn and prove, sufficient knowledge has been unlocked having directly to do with the farmer to convince every thoughtful, reasonable person that science now is, and from henceforth must be in increasing degree, what it has become to every other industry of importance—a necessity. In fact, successful farm operation is even more dependent on scientific procedure than is any other industry approaching it in magnitude, since the farmer is concerned more directly with the fundamental forces of nature, both organic and inorganic.

To become in a measure scientific in farm operation should not be felt to be out of reach of the most humble of us, nor should the term "scientific" itself be thought to imply high learning in general. The word science in its truest sense is merely correct knowledge or information that has been verified by repeated, systematic experiment and observation. We can be just as truly scientific in such a simple matter as the pruning and training of a vine as in the more abstruse problem of transforming plant varieties by hybridizing; and likewise be as scientific in the feeding and milking of a cow as in the less well-understood problem of feeding our plants by breeding minute organisms in the soil for collecting and making available the elements of fertility contained in the atmosphere and those held latent in the soil.

That farmer who strives for the best and most systematic methods of conducting his farm operations must be considered scientific, whether his training has been secured in the class-room and laboratories of a technical school or has been gleaned and made his own from agricultural literature, bulletins and original experiments. The difference is merely one of degree.

One of the most convincing truths early learned by the writer came to him through the medium of an experimental garden-plot and a hoe. The entire plot was given the same preparatory tillage, fertilizing and seeding, followed by a single early cultivation of the plants. The plot was then divided into sections. Alternate ones were left without further cultivation, the soil being kept free from weeds by pulling them. The other adjacent alternate sections were given deep, thorough and frequent tillage until the plants matured. By that single experiment more insight and conviction were secured as to the scientific relation of moisture-conservation and soil-aëration than it would have been possible to obtain by years of unthinking, haphazard performance. B. F. W. THORPE.

A SOUTH DAKOTA CLAIM SHANTY

The Silo

I have a friend who owns four farms, and he has silos on three of them. Cows are kept on each of the four farms. The cows on the home farm, where there is a silo, are not kept as they should be. The silo is a passive agricultural institution. Its potential energy is immense; but as it is a fixture, it simply cannot carry its contents to the cows, nor apportion out the feed for each animal, nor make additions of other things needful in the ration besides silage. Neither can it patch up holes in the barn, nor bring the cows in out of the rain or cold, nor test the cows and weed out the poor ones. Being thus passive, it has often had to shoulder the sins of poor dairying, and thus find itself condemned.

The one farm having no silo has an excellent caretaker of cows, and the cows on that farm look better and do better than those on the home farm; therefore, the silo is growing to be an object of suspicion.

Last fall the silo on one of the farms was not filled. Today the farmer there said to me, "The cows are not looking nor doing so well. Feed is getting scarce. We will be out of feed before spring, and the cows will go to pasture in different shape without silage than they went in last spring after having silage all winter."

This seems to me to be a keen illustration of the utility of the silo. In my section the corn crop was possibly the shortest ever known here. Hundreds of farmers will be buyers of corn before spring. The fodder grew well generally, but the ear failed to do its part. Those who have well-filled silos have plenty of good feed, and their cows will be wintered well and cheaply. Where corn appears to be worth more to sell than it is to feed, it is sold, and the cows grow thin and unprofitable. W. F. MCSPARRAN.

Pruning an Apple Orchard

[CONTINUED FROM PAGE 1]

The year just passed this orchard produced about five thousand bushels of marketable apples, which were sold for fifty cents and sixty cents in the orchard. Commissionmen take the output every year, and ship right to the houses that handle the output of the celebrated fruit sections.

Mr. Daugherty believes that if care is taken in selecting the site for an orchard, and ordinary care and intelligence are used in spraying, pruning and preventing overbearing, apples can be grown practically in all parts of the country.

Most of the apples selected in eastern Indiana to be exhibited at the St. Louis Exposition were gathered in this orchard. No higher tribute to the perfection of the fruit grown there can be offered than this.

Mr. Daugherty seldom fertilizes his orchard. In case a tree is observed that apparently needs fertilizing, a liberal spread of barn-yard manure is scattered about the tree to a distance of twenty feet from the trunk He has not used commercial fertilizers, but does not doubt that good results would follow if the proper compound could be applied.

Notes and Comment

The production of oranges in the United States amounts to twelve million boxes, of which over two thirds are produced in California, the rest in Florida.

In the vicinity of Bloomington, Ill., experiments are in progress with a machine to cut and shuck the standing corn in the field. It is estimated that from eight to twelve acres can be cut and shucked each day.

The farmer who farms on lines in accord with well-known scientific principles, and sticks to the business through good seasons and bad ones with persistent positiveness, is sure to win out in the long run.

Farmers should profit by the experiments made at the various state experiment stations. Their conclusions have a cash value. It costs money to experiment. Every progressive farmer should see that his name is on the list for the experiment-station bulletins.

The government cane-syrup experiment station at Waycross, Ga., has turned out a fine grade of pure syrup. It is made from the Ribbon cane, and is almost equal to pure maple-syrup. The Waycross Cane-Growers' Association secured the experiment station at that place.

If an orchard is to be planted next spring, order the trees early. Make the selection of trees from those that have been propagated from buds taken from trees that have the reputation of being abundant and regular bearers. Ascertain which are a few of the varieties that are in the greatest demand, and plant them. It is better to pay high prices for the best-bred trees than to take those of poor quality at half price.

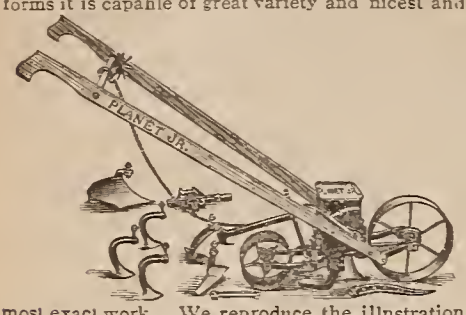
The dairy farm is the place to grow vetches. This crop must not precede one of wheat, as the vetch-seed will become mixed with the wheat. Sow vetches one year, plant corn the next, and then sow wheat, corn or grass. The culture of corn puts the ground in excellent condition for wheat or grass.

The standard for creamery extras has been advanced by the New York Mercantile Exchange from 91 to 93 points. This is as it should be. Too much butter is being put on the market as extra, of which the correct grading would hardly exceed prime. Extra should be extra always, and the higher grading will aid materially in making it so.

The progress which has been made in California, Utah and Colorado, where irrigation is a necessity, and where valueless desert lands have advanced to almost fabulous prices, is the best evidence possible that small farms and a dense rural population, resulting in unusual social advantages, are for the welfare of the American farmer and the American people. * * *

Planet Jr. Garden Tools.

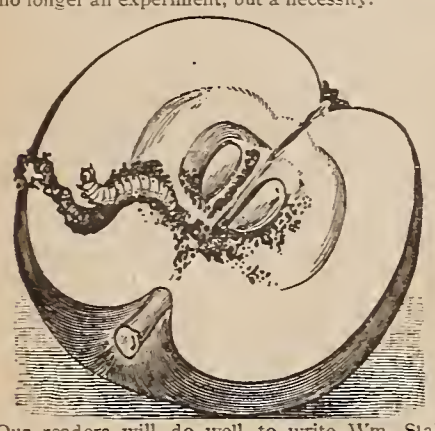
By the purchase of a single tool a gardener may secure in the various attachments about everything in the line of planter or cultivator he will need. This is well seen in the Planet Jr. No. 4 Combined Drill here shown. It is set up as a seeder ready for hill or drill planting and lining out rows. But a minute is required to convert it into a wheel hoe, cultivator or plow. In one or another of these forms it is capable of great variety and nicest and



most exact work. We reproduce the illustration merely as a suggestion of the adaptability and comprehensiveness of Planet Jr. tools. It is but one of forty, from which it may well be inferred that there is a Planet Jr. for every special duty. Width of cut of each tool, the easy and speedy conversion from one to another form of the combined tools, the nice work and easy running of all, are well known Planet Jr. characteristics. The line includes hand and horse hoes, cultivators, plows, harrows and special sugar beet cultivators. The 1904 free catalog of S. L. Allen & Co., Box 1107-F, Philadelphia, contains over 100 illustrations, including sixteen beautiful half tones from photographs showing Planet Jrs. doing duty on characteristic farm and garden scenes in this and foreign lands.

SPRAYING FRUIT TREES

The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an experiment, but a necessity.



Our readers will do well to write Wm. Stahl, Box 1, Quincy, Ill., and get his catalogue describing twenty-one styles of Spraying Outfits and full treatise on spraying the different fruit and vegetable crops, which contain much valuable information, and may be had free.

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quickly, that are full of vitality, that have the necessary qualities of right growing, maturing, choice variety and selection, are what you get when you buy

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L. L. OLDS SEED CO., Drawer D, Clinton, Wis.

Gardening

By T. GREINER

SEED CATALOGUES seem to be slow in making their appearance this year. The writer would like to have a copy of every one issued by our seed trade, and will give each a most minute examination as soon as received. I may have something to say about them in succeeding issues of this paper.

CLOTH COVERING FOR FRAMES.—A reader in Ulster County, New York, asks about covering frames with oiled muslin in place of glass. I have tried muslin covering repeatedly, but never secured satisfactory results. Such covering may serve for forcing asparagus and rhubarb in tentlike structures, heated inside by steam or hot-water pipes, and in the South for tobacco-plant beds, etc., but in this cold climate, with many dark days during February and March, I want glass.

ABOUT THE CAUSE of hollow stalks in celery much speculation has been indulged in. Neither are we sure of the right solution of the problem even now. I begin to think that the trouble is hereditary. A large celery-grower tells me that he has used seed of the same variety obtained from different seedsmen. One's seed gave perfect and solid stalks, the others' under the same treatment gave hollow and worthless stalks. This experience has been duplicated not only by himself, but by other growers, also. I once planted a number of varieties together, giving all the same soil, manure and treatment. The Red-Ribbed, White Plume and Golden Self-Blanching all made stalks of excellent quality, brittle, solid and sweet, while the Pink Plume (seed obtained from the same seedsman who furnished the others) gave the most worthless stalks I ever obtained in any celery, every stalk being nothing but a shell—hollow from root to top. I have had it act in this way since, and now I wonder whether the Pink Plume, owing to heredity, is not more subject to this particular trouble than other celeries.

ADVANCE PURCHASE OF SEEDS.—The same celery-grower tells me that he habitually buys his celery-seed a year ahead, so as to be able to test it the first year, and thus be sure of what he can expect to get the next year. Theoretically, old seed is more liable to make celery that will "bolt" (go to seed rather than make good table-celery) than is strictly new seed. In practice I have found very little, if any, difference in this respect between old and fresh celery-seed, and if there were, I could guard against mishaps of this kind by sowing the seed a trifle later. My own personal experience leads me to indorse this plan of buying celery-seed a year ahead, without reserve. In fact, I have practised this plan for years, not only with celery, but with many other vegetables, especially melon, radish, cabbage, cucumber, etc. It is a plan that has other advantages besides the one named. It will enable us to buy seed in larger quantity, perhaps in some cases a two and three years' supply, and therefore to get it at a cheaper rate than when we buy in smaller quantities. This applies to the home grower as well as the market-gardener. When we grow radishes, for instance, either for the home table or to supply a limited number of customers, if we were to depend on buying the seed just as fast as needed, we would pay ten cents an ounce, or at the rate of one dollar and sixty cents a pound. If we buy even half a pound or a pound, giving us one or two years' supply for home use, we will get it at forty or fifty cents a pound, and we will not have to run or send to the seed-store whenever we want to sow a little seed. It is already on hand, and we know that it is good.

CABBAGE-MAGGOT AND PROTECTIVE COLLARS.—R. W. B., of Staten Island, N. Y., inquires about the size of the tarred-felt collars recommended as a preventive of the cabbage-maggot, and about the way to put them on. He has a splendid place to raise early cauliflower, but is discouraged about planting this crop on account of the presence of the maggot. Well, the cabbage-maggot does like cauliflower, and where abundant they are liable to ruin a whole crop. The tarred-felt collars are probably as sure a thing to protect the plants as anything. The collar is a piece of single-ply tarred felt cut out of the sheet, best perhaps six-cornered and about two inches across, with a slit from one corner to the center, where it ends in a star-shaped cut. This collar can be easily slipped around the stem of the newly set plant, the flaps of the star-shaped cut in the center fitting tightly against the stem and shutting off every chance for the maggot to get down to the root of the plant. No soil should be allowed to accumulate or wash upon the felt collar, as in that case the fly would probably deposit its eggs on the stem, and the soil on top of the collar would give to the maggot a chance to work under its protection and tunnel through the soft stem down into the root. It is a pity that such collars are not put on the market. Many growers would buy them, and gladly pay enough for them to make a good profit for the manufacturer. Our friend wants to try tobacco-dust and coal-soot mixed with kainite or muriate of potash, about equal parts by measure, putting a small handful around each plant, directly upon the surface of the soil, after setting the plants. This treatment may have very good effect. I think highly of tobacco-dust as an insect-repeller, and cauliflower needs and can stand great quantities of potash, and is not very easily injured by chlorine. Tobacco-dust is very rich in potash, also. I often use it for insects on general principles.

WINTER FOR HAIRY VETCH.—The hairy vetch is coming more and more to the front as an orchard cover-crop. All who have tried it speak well of it. My cattle would not eat the rank growth in the green condition, and unfortunately I did not try it as hay, but it has worked a great improvement in the soil. In response to my statement that the winter vetch failed to produce seed on my grounds, although blooming abundantly for months, Mr. M. M. B., of Saint Charles, Ill., writes me that he thinks he has solved the problem. If seed is sown in August or September, or so late that the vetch will not bloom the same season, he thinks it will seed freely the following spring. My vetch, however, was sown about that time, did not bloom the first season, and yet failed to produce a ripe pod. On the other hand, I have reports from many others who have planted vetch, and they state that it has produced seed freely. So perhaps my experience was exceptional, and the difficulty will be overcome in time. My Illinois friend says he has a correspondent in Mississippi who grows not less than one hundred acres of winter vetch and winter oats together every year. He sows both in the fall, and pastures the crop from December to March. The stock is then taken off. In about six weeks the double crop is cut for hay, or left a little longer to mature for seed. His crop averages about forty bushels of seed—oats and vetch—to the acre. He sells the seed—oats and vetch—for about one dollar a bushel. M. M. B. has had no trouble to get the plants to produce seed. He says: "Last year the plants grew to the length of six to eight feet, and the ground was hid from sight. I think many advise sowing too much seed to the acre. Some advise sowing one bushel, or sixty pounds. Now, it is my belief that one peck, or fifteen pounds, is plenty for an acre, for it is a wonderful plant to start if given a chance. As we cannot grow winter oats in the North with winter vetch, we should use wheat or rye—say half a bushel only to the acre—mainly to hold the vetch up or off the ground. Some advise sowing alsike clover instead. That might make a very good substitute for the wheat or rye." Prof. John Craig of Cornell stated at the last meeting of the New York State Fruit-Growers' Society (January, 1904) that fifteen pounds of vetch-seed (one peck) is enough to sow an acre, especially if sown in drills a foot apart, and from the rank growth which I obtained by sowing four times that amount of seed, I believe he is right. In fact, the cause of my failure to get vetch-seed may be found in the excessive quantity of seed used. With fifteen pounds of seed to the acre we have little reason to complain of the expensiveness of using vetch as an orchard cover-crop, although I still believe that when we get into the habit of growing vetch we will try to produce our own vetch-seed, or will be able to buy it for less than seven or eight dollars a bushel.

Fruit-Growing

By S. B. GREEN

MOSS ON FRUIT-TREES.—J. R., Midland, Wash. A very good treatment for the removal of moss from fruit-trees is to spray the trees while the buds are dormant—that is, during the winter or early spring—with a strong solution of concentrated lye. Bordeaux mixture will also remove the moss, and it has the advantage that it may be used while the tree is growing. Also scrape off the loose bark and moss on the trunk and larger branches.

SPRAYING FOR WORMS.—W. A. S., Springfield, Ill. From your description of the injury done, I am inclined to think that your apple-trees were stripped of their foliage by what is known as the canker-worm. The best remedy for this will probably be spraying the foliage with Paris green and water, or using a dust spray made of seventy-five pounds of air-slaked lime and one pound of Paris green. This should be used as soon as the worms appear. Do not wait until they have done much damage.

LEAVES OF BLACKBERRIES TURNING BROWN.—W. S. E., Halstead, Kan. I do not know what it is that causes the leaves of your blackberries to turn brown before the berries are grown. I am inclined to think, however, that it is due to some fungous disease, but sometimes such injuries are due to the presence of red spiders. I do not know of any satisfactory remedy for the trouble of which you complain. It is quite possible that the weakness is temporary, and will not occur next year, or it may be some weakness that might be overcome by changing variety.

DUST SPRAYS.—L. A., Edgard, La. By dry spraying is meant the use of some dust as a medium for the distribution of poison, instead of using water. The advantage of it is that it is much easier to mix and transport, and no special vessels are required in which to mix it. Its application is in many cases quicker than the ordinary liquid spray, and the outfit as a whole is much cheaper. On the other hand, except in exceptionally moist weather, it has seldom given as good results as the liquid sprays. The most common way of using Paris green with the dust spray is to mix about one pound of Paris green with seventy-five pounds of air-slaked lime, then dust it on the foliage early in the morning, while it is still moist with dew. This material does not stick well in the middle of the day, when the foliage is dry. For potatoes this works well, as does also one pound of Paris green and thirty pounds of cheap flour. There are several blowers for the application of this material. One of the kinds most commonly used is known as the powder-gun, and for some cases a cheese-cloth sack is very satisfactory, as for currant-bushes. While I do not think that the dust spray is going to supplant the use of liquid sprays, I do believe that it is an important way of applying poisons, and a method that has been too often overlooked in the past.

Munson on Root-Pruning

There is quite a difference between different species and varieties of trees as to the effect of root-pruning on their growth. Generally, I find that the slower any variety is to callous and start roots, the more of the original root should be left in transplanting. According to this law, the plum, and especially the persimmon and the nut trees, should not be so closely root-pruned as the apple, peach, pear, quince, and all trees, vines and shrubs that grow readily from cuttings. As a rule these slow rooters are more fleshy and proportionately heavier in root than the easy rooters, and this furnishes the top with a supply of moisture and food to sustain the top until root-growth is set up afresh after transplanting. Nature gives us many a hint along these lines. The willow often throws down small branches (broken by the wind or otherwise), which falling on moist soil soon root and become trees. Nut and persimmon trees never do this. A willow or elm post cut and driven into the soil butt downward in winter will almost surely grow the next spring, and quickly become a tree; but posts from nut-trees, persimmons, plums, most oaks, apricots and cherries will not do this, and these are the very trees that need proportionately more root to be successfully transplanted.

A good knowledge of physiological botany is required by the nurseryman, horticulturist and landscape-gardener, who have to handle many species of plants, in order to succeed well with it. I have often grown fine trees of peach, apple, pear (Keiffer and Le Conte), plum (Marianna), maple, sycamore, elm, catalpa, etc., from cuttings, and all these do better to be close root-pruned in transplanting, and should always be correspondingly top-pruned. But no tree in transplanting should be so closely root-pruned that it is like a smooth stick stuck in the ground, for then it may be blown about before the young roots can well anchor it, and lean over to perish. Then, again, the roots should be pruned less closely in a very dry climate, and the tops more closely.

There is no question that great advantage is given by having the land deeply and thoroughly loosened prior to planting, and hence the whole orchard should be thoroughly subsoiled, or if in yards and streets, where general subsoiling cannot be done, broad, deep beds—"holes"—should be prepared, and so arranged that the rain will remain and penetrate the soil. T. V. MUNSON.

The Grange

By MRS. MARY E. LEE

Address of Hon. F. A. Derthick

THE press and grange workers all unite in commending the excellent address of Worthy Master Derthick. It was wise, timely, conservative, expedient. It was one of the best expositions of the farmers' rights, duties and demands ever promulgated. It will rank high in grange literature. At the request of many deputies, the address was printed in pamphlet form for distribution. Following are excerpts:

THE FARMER'S CONDITION

"Every orator and newspaper in the land rouses our enthusiasm and national pride to highest pitch as they speak in glowing terms of our marvelous achievments in industrial and economic lines. Our commerce has been extended, new markets have been opened to our produce, and we have secured lucrative prices for it. Nearly three fourths of our exports are agricultural, and this annual billion-dollar contribution from the soil swells the world's balance-sheet in our favor. Thousands of trains operated by an army of wage-earners carry our grain, fruit, live stock and timber to the seaboard, from whence magnificent steamships plow the ocean, the proud carriers of a nation's wealth.

"Other nations, dismayed at the amazing productivity of our country, and alarmed at the loss of markets that were once theirs, passed restrictive laws, while Germany, eager to attain supremacy on the world's battle-field of production, sent an embassy of eminent scientists and practical men to study our agricultural methods, to the end that they might be introduced into their own country. This records a glorious achievement, and points to a prospect most inspiring.

"But with all this prodigious industry, giving employment to tens of thousands not tillers of the soil, exciting the envious rivalry of foreign countries, which are alarmed at the scope and audacity of the American invasion, the farmers have profited but little. The farmer is both owner and laborer, yet he has not received his share as producer, nor his wage as laborer.

"In the fields of mining, manufacture, commerce and transportation, millionaires are so common as to excite no surprise. The farmer, with an investment of nearly twenty billions of dollars, sends forward annually a mighty, continuous stream of products, which immediately becomes the foraging-ground of the world. The disposition is to leave the farmer only such an amount as will maintain him in good working condition."

LABOR

"Every other department of human activity supported by speculators names absolutely not only the price of its own wares, but sets the price upon our products as well. The industrial and economic conditions of the country have become so favorable to the business world that the captains of industry are able to offer so inviting remuneration for labor as to rob rural communities of the help so much needed on the farm. The contest is too unequal. The farmer must obtain better prices for his products, or pay less money for labor and supplies."

BUSINESS METHODS

"It is of paramount importance to the farmer of to-day that he make a study of business methods. The general intelligence concerning growing crops, feeding, and farm management generally, far exceeds that of the profitable disposal of these products. We have learned how to make two blades of grass grow where but one grew before, but we fail in taking care of the extra blade. Sufficient stress has not been laid upon the profitable disposal of the increased output made possible by better methods.

"Farmers are possessed of tireless energy and indomitable courage, but these qualities alone cannot win in the fierce competition which they must encounter. We are embarked upon an era of conflicts—bloodless, we believe, but conflicts nevertheless. The conflicts of the future will be of intelligence, and the weapons will be brains, not bullets. In the arena of economics will the wars be waged, and the victory will be to him who most skilfully arrays his forces. The most brilliant intellects of the country are struggling for supremacy upon these new battle-fields. Brain is pitted against brain, training against training."

WHERE THE BLAME LIES

"There is no disposition to cherish feelings of bitterness or nurture a spirit of complaint against men in other avocations. In every normal human heart there is a hope that 'springs eternal'—the hope of reaching the goal of success. In every field of activity save agriculture advantage has been taken of the irresistible principle of coöperation. It is not strange that individual and corporate interests in the wild rush to reach the goal should cast their burdens upon agriculture, whose custodians have remained silent and indifferent in the matter. The farmer is entitled to no sympathy, for there is not a discrimination, not a burden, not an injustice, resting upon agriculture to-day the remedy for which is not near at hand. The grange offers to the American farmer the same opportunity for intelligent coöperation that is winning success in other fields of labor. Education and coöperation are cornerstones upon which our order rests, and they may become willing handmaids to the farmers of the land."

THE BROWNLOW BILL

"Briefly, the bill, if enacted, creates a department at Washington, with proper superintendents to take care of the building of these good roads. Twenty millions of dollars are appropriated, to be divided among the several states according to their population, except that no state is to receive less than two hundred and fifty thousand dollars. Each state, county or town receiving federal aid must add a like amount to the sum received from the United States government. Should any state not accept within four years the amount allotted to it under this law, all such amounts are to be relotted among states which have taken the entire original allotment. It will be seen that under this law forty million dollars would be expended upon the public highways. The allotment for Ohio would be one million two hundred thousand dollars, which doubled would give about two and one half millions for our state. In the absence of state action, any township or county may apply and receive its quota. Some such law is quite certain to be enacted. Our order is now brought face to face with a proposition that is only the beginning of a mighty undertaking—a proposition for the New World to embark upon a way traversed by the Old long years since.

"France has built and maintains twenty-three thousand miles of road without cost to the farmers. Italy has five thousand miles of road under similar conditions. England and Germany have enjoyed perfect roads for many years.

"In our own land the farmers practically alone have borne the burden of road-building, and the work has been done in a haphazard manner. New York took up the question of state aid, and last year appropriated six hundred thousand dollars. The state pays fifty per cent of the cost of the improved road, the county thirty-five per cent, and the towns fifteen per cent. Several New England states have begun similar work. Ohio, so far as I know, has never appropriated a penny for road-improvement, yet Ohio is as deep in the mud as any other state.

"The opinion is ventured here that whatever losses the farmers of Ohio have suffered in the past, the loss from poor and impassable roads exceeds any other. According to careful estimates, one dollar and twenty-five cents will haul a ton five miles on a common road, while the same amount will haul a ton fifteen miles on a well-made stone road."

CONTRASTS IN APPROPRIATIONS

"The United States government appropriated last year about thirty-three million dollars for river and harbor improvements, and within the last ten years nearly two hundred million dollars for the same purpose. Within the memory of those here the federal government has given immense grants of lands to private enterprises, that trunk lines of railroads might be built from ocean to ocean, but not one dollar for the roads for the farmer. But as has been well said, 'Before a ton of produce can be loaded on a car or deposited in the hold of a vessel it must be hauled over a country road.'

"These suggestions are offered in the belief that this important question should be recognized by this body, and our representatives in Congress be instructed as to our wishes upon the bill now pending. The National Grange will doubtless support the proposition for some systematic plan of road-improvement by government aid, possibly insisting that the respective states retain the power of expending their own contributions. The building of country roads cannot be disassociated with the rural delivery of mail, establishment of the parcels post, and the centralization of schools now in progress."

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NO MATTER WHERE IT IS

Do you want to sell your farm?
Do you want to sell it quickly and with the least possible expense?
Do you want to sell it at a reasonable price instead of sacrificing a good portion of its value?
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If these are your wants, I can fill them.
For eight years I have been filling these wants for people in every section of the country.
The result is the largest real estate brokerage business in the world.
Isn't that proof that I have been fulfilling my claims and isn't it sufficient evidence that I can sell your property?
Eight years' experience, offices in principal cities from Boston to San Francisco, hundreds of special representatives and an expenditure of over $100,000 a year in advertising, give me better facilities for selling your property than any other broker anywhere.
It doesn't matter whether your property is worth $500 or $500,000 or in what state or territory it is located. If you will send me a description including your lowest cash price, I will tell you just how and why I can quickly sell your property for cash and at the least possible expense to you. It will cost you nothing to get this information and I am sure you will be glad you asked for it.
If you want to buy any kind of a property in any part of the country, tell me your requirements. I will guarantee to fill them promptly and save you some money at the same time.
W. M. OSTRANDER, 210 NORTH AMERICAN BUILDING, PHILADELPHIA.

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An elegant book of 178 pages, it contains hundreds of illustrations from nature and **six superb lithographic colored plates.** It shows in natural colors thirteen "true and tried" new Vegetables of sterling merit, three new Nasturtiums (of a distinct type), and seven Superb Sweet Peas,—all painted from nature, by New York's leading artist, at our famous FORDHOOK FARMS.
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we feel quite sure that you will favor us with **at least a trial order,** and this is all we ask, as BURPEE'S SEEDS will tell their own story in your garden and fields.
Better send for this catalogue **to-day!** One cent spent by you insures twelve cents spent by us, and this should be sufficient to convince you that we have *faith* in BURPEE'S SEEDS and also in our ability to persuade you **to try Burpee's Seeds,** if you will only read BURPEE'S FARM ANNUAL.
Are you willing to spend that cent?
Shall we hear from you? If not, YOU will miss an opportunity to become acquainted with **the very BEST SEEDS that can be grown!**
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To every one who will state where this advertisement was seen and who encloses **Ten Cents** (in stamps), we will mail the catalogue, and also send **free of charge,** our famous **50-Cent "Henderson" Collection** of seeds, containing one packet each of *Sweet Peas, Large Mixed Hybrids; Pansies, Giant Fancy Mixed; Asters, Giant Victoria Mixed; Big Boston Lettuce; Early Ruby Tomato and. Cardinal Radish* **in a coupon envelope,** which, when emptied and returned, will be **accepted as a 25-cent cash payment** on any order of goods selected from catalogue to the amount of $1.00 and upward.
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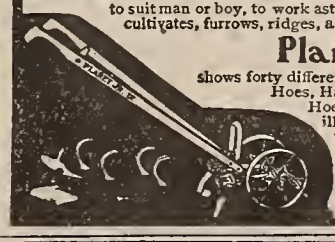
No. 3 Planet Jr. **Hill and Drill Seeder,** shown on the right, holds its position as the tool for perfect hand seeding. Converted in an instant from drill to hill planter and back again. Drops in hills 4, 6, 8, 12 or 24 inches apart. It opens the furrow, drops the seed, covers it different depths, rolls down and marks the next row. With this tool any novice can plant all garden seeds at the speed of a walk and with great accuracy.
No. 12 Planet Jr. **Double wheel Hoe** is the companion tool for the No. 3 Seeder. The plant is never too small nor too large for it to work perfectly. Quickly adjusted to suit wide or narrow rows, to suit man or boy, to work astride plants of any height up to 20 inches, or between them. Kills weeds, hoes, cultivates, furrows, ridges, and throws earth to or from plants as desired.

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Live Stock and Dairy

The Heifer

IN THE dairy heiferhood stands between calfhood and motherhood, and is the state in which the character of the life of the cow is to a very great extent determined. The improved dairy-cow is an animal of sensitive artificial development. This fine development is what we call heredity, and toward its fixation into a type all careful breeders of her kind are working. This work has produced wonderful results, but we are not yet near the end of it, not even where we may safely rest, for the tendency to reversion to type is a constant warning to the careful breeder to be on his guard.

Now, it is a well-recognized fact in animal husbandry that the most active agency in animal-development toward improving or fixing a type or tendency is the simple one of feed—abundant, proper feed. It is readily understood that until we can truthfully boast that we have fixed the characteristics desired in our dairy-animals, so that their transmission to offspring is a certainty, that our guarding against reversion to type must not be relaxed. This being recognized as true, it requires no argument to show a reasonable breeder that the natural, the original, primary characteristics or functions make the first demand upon the food consumed, and the more artificial ones have to take what is left, and if there is a deficit the less well-established tendency of the animal suffers most. It is not a survival of the fittest, but an appropriation by the strongest.

Now, the giving of an abundance of rich milk is a created or an evolutionary function of the good cow. Man has encouraged and fostered the cow in this work. It is a function that grows up with the calf and the heifer, and reaches its maturity well on in the life of the cow.

All good dairymen know that without enough feed of a proper kind the cow will diminish her milk-flow, become reduced in flesh, and soon pass below the point of being kept profitably; but every dairyman does not know that the very kinds of feed that keep the cow in good flesh and maintain her milk-flow are the kinds that in the heifer build up the qualities so much desired in the cow. The well-bred dairy-heifer is as much a creature of man's skill in directing and amplifying functions as is the heavily, continuously rich-milking mature cow.

If dairymen in general do know this, and that plenty of proper feed is necessary for the heifer, they do not live up to their light. A student of dairyology does not have to go far among breeders to find heifers royally bred that are outrageously fed. Many of these same breeders will tell one what may be expected from this heifer or that one on account of the long lines of producing blood in their pedigrees. I like the heifer's pedigree filled with good blood, but I like quite as much to keep her belly full of good food, for the most royal blood that ever flowed from worthy parents will get mighty poor and thin when fed on brambles and ragweeds.

After the true dairy-heifer is safely in calf she can be fed almost any amount of wholesome food she will eat and digest. There is not much danger of her getting too fat, and if she does put on a little superfluous flesh, if she is truly dairy-bred she will liquidate it into the milk-pail when she enters the dairy as a cow. It is equally true that the heifer carrying her calf cannot possibly do herself justice, either as a heifer or when she has graduated into cowhood, unless she has been well fed as a heifer. It is this short-sighted, stingy policy of underfeeding the calves and heifers that makes so disgracefully many thoroughbred scrubs in our pedigreed cattle. The pedigree of the animal is a charter of obligations to the animal's owner, and all the "happy nicks," inbreedings and outcrossings, will not make good cows where feed is unwisely withheld at any time during the life of the candidate.

W. F. McSparran.

Cotton-Seed Meal

How much cotton-seed meal can be fed daily to milk-cows without deteriorating the butter? According to Doctor Allen of the Agricultural Department Office of Experiment Stations, Northern dairymen incline to the belief that not to exceed two pounds should be fed daily.

"It is a general experience," said Doctor Allen, "that cotton-seed meal produces a hard butter, and in some instances a small amount of such feed is given simply to secure this result. The Mississippi station has made some experiments with large feedings of cotton-seed meal which are interesting, and they show that liberal rations of cotton-seed can be fed with no bad results. The station herd was fed daily for a period of two weeks on a ration composed of ten pounds of cow-pea hay, twenty pounds of corn silage, four pounds of wheat bran and five pounds of cotton-seed meal, and the milk during the last two days of this period was made into butter. In the two weeks following this, six pounds of corn-and-cob meal was substituted for the cotton-seed, and butter was made as before. The butter was sent to St. Louis, where it was scored as follows on a scale of 100: Butter from cotton-seed meal, 95½ points; butter from whole cotton-seed, 96 points; butter from corn-and-cob meal, 96 points. The finding of the station was that as there was practically no difference in the score, the quality of the butter was not injured by feeding as much as five pounds of cotton-seed meal or six pounds of cotton-seed. The test also showed that this cotton-seed butter melted at 100.1 degrees Fahrenheit, while that from cows fed no cotton-seed melted at 96.8 Fahrenheit, thus showing the cotton-seed butter to be firmer and more capable of standing shipment during warm weather."

Live Stock at the World's Fair

The constituency of "The Daily National Live-Stock Reporter" has an especial interest in the live-stock show at the Louisiana Purchase Exposition, and a right to be gratified that the Exposition management has fully recognized the special claims of live stock in connection with the World's Fair at St. Louis. It is not alone that St. Louis is practically the geographical center of the greatest live-stock-producing area on the globe, or that in connection with the celebration of the acquiring of the Louisiana Purchase territory particular importance must be attached to the development of the live-stock industry in the United States, although these in themselves are excellent reasons for giving more than secondary recognition to animal husbandry; but outside of special claims, the importance and magnitude of the industry in this and other countries make it just that live-stock farming should receive consideration at the hands of the universal exposition of 1904 on a larger and in some respects newer basis than that accorded at any former international exposition.

No stockman has reason to be disappointed with the action of the Exposition authorities, for the allotments made for live stock are in many ways on a scale unknown at previous world's fairs. An independent department has been created, and more than a quarter of a million dollars set aside for cash prizes. With this substructure to build upon, it cannot be said that the World's Fair directorate have not offered opportunity to set new marks and new standards in the history of stock displays.

It should be borne in mind that an exposition of universal character is the display in miniature of the useful activities of civilization. Nations from the four quarters of the earth are already preparing their headquarters on the World's Fair grounds. The Chinese buildings are distinctly Chinese, not American; Brazil's lofty structure was designed by a Brazilian architect. The landscape effects around the buildings of Great Britain, France and Sweden are peculiarly the work of gardeners from those countries. The World's Fair is a cyclopedia at first hand wherever possible. As nearly as may be the progress of the world and the manner in which progress is being made will be actually shown. The fair of 1904 is to be a workshop rather than a library.

This means a greater call upon the friends of animal husbandry to demonstrate what there is of good and of improvement in that industry. By practically doubling the largest cash amount ever before offered for live-stock prizes and in other ways making its recognition wholly unprecedented, the Exposition management has fixed a responsibility upon us from which we may bring results to be proclaimed to all the world.

It is safe to say that not many who will see the World's Fair live-stock show in 1904 will live to know its records as relegated or its standards replaced. "At St. Louis in 1904" is a phrase more epoch-marking than either you or I can at this time comprehend. This means more to what may be designated as the "St. Louis territory" than to the balance of the live-stock world, because of the benefits naturally coming to this region through the holding of the World's Fair at St. Louis.—F. D. Coburn, in The Daily National Live-Stock Reporter.

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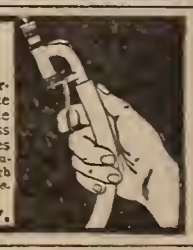

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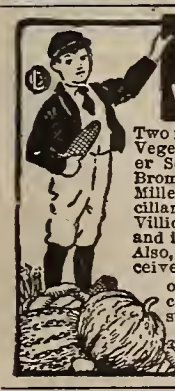
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Live Stock and Dairy

Live-Stock Interests

In his address at the Portland convention, President John W. Springer of the National Live Stock Association said:

"We cannot raise live stock without adequate railway transportation, and better service than the industry is now receiving. Rates have been raised on all live stock, and the average running-time is less satisfactory than formerly, while transportation to actual shippers has been arbitrarily cut off, and this industry especially selected for crucifixion. The railway managers expect you to go to market with your live stock, care for them, which keeps the management from hiring professional shippers, and you are then advised by the corporation that you can pay your way back home or walk. At the prices you have received for the year at the big markets you have not had money enough left after paying your freight (which of course is first) and feed bills, your mortgage and the 'intrust' to either buy a ticket home or to stay where you stranded.

"Another thing—a law should be passed by Congress compelling railways to make at least twenty miles an hour with live-stock shipments destined for market.

"We are still knocking at the doors of Congress for a five-year census of live stock, to be taken and promptly disseminated; so all the stock raisers and feeders may know just what proportion has been put on feed, in order that we may draw our own conclusions as to the proper time to ship to market.

"We are still urging Congress with all our power to pass the Grosvenor Anti-shoddy Bill, which seeks to compel every manufacturer to mark in plain letters and figures just what percentage of every yard of cloth woven is wool, cotton, hair, shoddy, etc. We do not aim to cripple the manufacturers of cloth, but we insist upon behalf of all cloth-consumers of this land that the selling-tag shall plainly reveal to every purchaser just what sort of a suit he is buying, in order that the outrageous frauds against woolen goods may be stopped.

"I regret to say that the year last past has witnessed a large number of failures among honest, hard-working, patient and uncomplaining stockmen in the United States. Without apparent reason prices began to drop, and they have gone from bad to worse until we see the cattle kings in the Hereford and Shorthorn world forced into bankruptcy, their hard-earned fortunes dissipated and their careers blighted. It must be conceded that the consumption of meat was never so great, or the retail prices never so high. It must be admitted that we still have a growing foreign demand, rather than a closing of markets against our meat products.

"Here is where the great combine called the 'packing kings' comes in. We all concede they have made colossal fortunes. We know they have converted the old neighborhood slaughter-house, with its odors and nuisances, to gigantic abattoirs, where the by-products are all saved and every ounce of the animal is turned to a profit. We producers have paid for the hundreds of millions now represented by the 'Big Four' so called. We commend their success, but we protest against the gigantic monopoly they have forced on the people of the whole country—both producer and consumer. We protest against the withdrawal of open competition in each and all of the great markets of this country in the agreement made every day between the buyers of these houses.

"We demand laws which will prevent daily meetings of packers and their agents to arbitrarily fix the prices to be paid on the hoof, and also on the block. Every stockman in this country is generous, and willing to give and take, but he certainly objects to giving the whole profit of raising and feeding live stock to a merciless aggregation of packing-house capitalists, who by their actions 'want the earth.' It was these reasons which forced a large number of the biggest producers to meet in Kansas City and organize 'the Independent Packing Company,' with a capital of five million dollars."

YEARLING BERKSHIRE SOW, LADY BROADBACK
First at St. Louis Fair and Ohio and Michigan State Fairs

Feed for Sweet-Flavored Hams

A Northwestern gentleman visiting an Illinois farmer who killed and cured his own meat was so captured by the superior aroma and flavor of the ham served at the farmer's table that he was led to inquire his method of feeding, which was given as follows:

"The ration is simple. It consists of corn, either shelled or on the cob, whichever is most convenient, and when conditions permit, the corn is always soaked. In addition to the corn is a plentiful supply of swill, made by adding twenty-five pounds of linseed cake (oil-meal) to a barrel of water."

He stated that he had fed hogs in this way for twenty-five years. They took on flesh faster, were always healthy, and had never had a case of hog-cholera.

I was surprised at the simplicity of his method and the cause of the excellence of his hog meat. If this method were universally followed, venison and fowl would be discarded, and the meat of the once-despised hog would soon become a delicacy more frequently seen on every table in the land. I have never lost an opportunity of recommending my friend's method, and in every case where adopted I have heard of nothing but the most flattering results.

It is self-evident that the reason for hog meat being under the ban in olden times was the fact that hogs were scavengers by compulsion. Driven to eat the most repulsive garbage to sustain life, their meat was affected thereby, and their meat was no doubt unclean.—The American Swineherd.

Notes

In the conversion of field crops into milk for butter-making purposes the Jersey leads all other breeds. For the best results warm stables are as necessary and as economical as a tool-house is for the protection of high-priced farm-machinery.

"The New York Packer" says that the egg trade of 1903 shows that one of two things seems to be certain. Either the nation is becoming more of an egg-eating people, or the increase of population has run largely ahead of the increase of egg-production.

As the result of a series of careful experiments in fattening hogs the conclusion has been reached that a fair average gain of hogs weighing from one hundred and fifty to two hundred and fifty pounds, when each is supplied with a bushel of corn, ranges from eight to fourteen pounds, and that ten pounds would be a fair average gain. * * *

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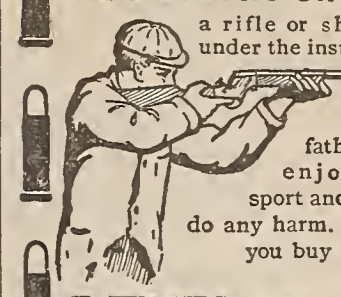
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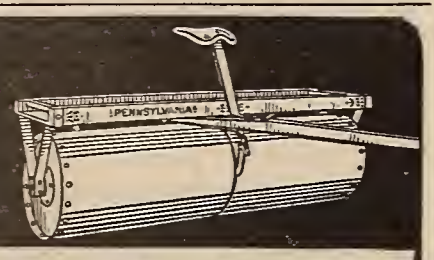

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that Page-Wire is twice as strong as common wire of the same size. Just try to cut it, or to pull it in two. You can judge for yourself.
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The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

Wages of a Child

A. E., Ohio, inquires: "Can a girl draw wages from her parents after she is eighteen years old without any contract?"

No, she cannot.

Boot-Money on Horse-Trade

G. W., Kansas, asks: "Can a note given as boot-money on a horse-trade be collected?"

Yes, if there was no fraud in the trade. If there was fraud, and the note remains in the hands of original payee, damages might be set off against the amount of the note. There is nothing illegal in a horse-trade if the parties are straight.

Estate in Germany—Plasterer's Pay

A. B., Pennsylvania, inquires: "How would one proceed to settle an estate of a grandfather in Germany who has been dead for nearly fifty years?—— Can a plasterer lawfully claim full measurement for doors and windows?"

Address the American consul at the nearest large town in Germany.——That depends upon the custom of the trade of the community.

Buying Land of Absent Heir

W. H. L., Kansas, asks: "There is a piece of land I would like to buy, but one of the five heirs cannot be found, not having been heard from for more than a dozen years. What would be the result if I should buy and she should turn up?"

You would be compelled to pay the absent heir one fifth the value of the land, and jointly account for a like portion of the net receipts.

Claim for Board

G. F. H., Ohio, writes: "A. loans money to B. on a note secured by mortgage at six per cent. A. lives with B., eats, drinks and sleeps, and pays no money for same for a number of years. Can B. put in a bill for board and keep to offset mortgage, nothing having been said about the board-bill?"

If A. and B. do not occupy the position of parent and child, B. could put in a proper bill.

Right of Heirs to Parents' Land

L. M. B., Kansas, asks: "A man and wife in Ohio owned land, a part of which came to his wife from her folks. It was sold by the husband, but the wife never signed any of the deeds. She has been dead eighteen months. Can her children, as her heirs, now enforce her claim on that land, and collect the same? Would her husband receive any of it, or would his signing the deed forfeit his rights to it?"

The husband no doubt would be estopped from claiming any rights in the land, his rights going to the purchaser. But all the rights the husband had in the wife's property was a life interest in one third. The value of the rest of the wife's property could now be collected by her heirs and an accounting of the rents and profits required.

Rights of Inheritance

C. T., Indiana, writes: "A., B., C., D. and E. are brothers and sisters. A., B., C. and D. married. A. and B. died, each leaving children. D. is a widow with no children, and has money and land in her own name. E. is a bachelor. In case D. and E. die without wills, would their nieces and nephews inherit part of their property, or would it all go to C. under the laws of Indiana?"

If a person dies without a will, and without lawful issue or descendant of such issue, one half goes to the father and mother, and one half to brothers and sisters and other descendants; and if there be no father or mother living, then it goes to the brothers and sisters and their descendants. The children of A. and B. would get the share that their parents would have gotten were they still alive at the death of D. and E.

Facts Sufficient to Break Will

Mrs. S. C., New York, writes: "My father made a will, leaving me five dollars. After the will was drawn up, two witnesses were called in. One witness swears that he saw my father sign the will, while the other witness swears he didn't. The lawyer asked my father if that was his last will and testament, and my father said, 'Yes.' Would he not have to say, 'This is my last will and testament,' or is 'yes' sufficient. My father was seventy-four years old when he died. During his life, and while he was in good health, he would make no will. My sister had brought lawyers to the house and tried to get my father to make a will, but this he would not do. When he made his will he was in feeble health. My sister never liked me since I was married, and I think they influenced my father to make his will, but I cannot prove this. Do you think I can break the will on this evidence, and get my share of the property?"

No, I do not think you could.

Contract to Give Life Estate

A. B. C., Ohio, wants to know: "A. (husband) and myself, C. (wife), worked and earned a little home, which is in A.'s name. We have sold, and bought another place, and will be in debt. I do not feel as though I want to work and help to pay for it, which I will have to do. A. will not make the deed jointly, and he will not make a will giving me the use of it for my life should he die first. A. is willing that it should be fixed so that I could have the use of it. Would an article or contract signed by A., and witnessed and attached to the deed put on record give C. the use of the property and buildings described in said deed if A. should die before it was paid for?—— Could C. work and pay the mortgage, and have that much more interest in the place, or would the heirs have to pay it, and C. still have the use of it?"

Yes, there could be an article or agreement made that would be binding.—— You would not need to pay off the mortgage, but if you did not the place might be sold. If you paid off the debt, you could hold it against the estate of A., provided you could show that it was the understanding, and that it was not a gift on your part.

Fence Along Private Right of Way

J. M., Missouri, writes: "A. owns a tract of land, B. and C. living the other side of A. In going from their farms out to the country road they have to pass through A.'s land on a by-road. This by-road leads to B. and C., but does not go any further. It has been a by-road for thirty years. A. has to keep up one line of fence on each side of this by-road in order to let B. and C. have right of way. A. does not want to stop B. and C. from passing through his land. A. keeps up these two lines of fence to keep out A.'s stock. Ought B. and C. be made to build fence on this by-road?"

The question is difficult to answer without an examination of the Missouri statutes, and then perhaps it would remain unanswered. In Ohio it is provided that the owners of such farm-outlets must keep up one half of the fence, and such would be the fair and just rule. In the above case it would certainly be very unjust to compel A. to keep up a fence whereby to give B. and C. an outlet from their farms.

Right Acquired by Prescription

E. A., New York, writes: "A. and B. own adjoining farms. Many years ago a former owner of A.'s farm was permitted by the then owner of B.'s farm to fence a jog into B.'s field to give stock access to the brook crossing B.'s field. The farms have changed hands several times, B.'s deed always calling for the straight fence. Can B. straighten the fence at the present time? Would A. have any right to cut timber on the jog, or use it in any way save to get to the water? What are the rights of prescription in New York State?"

If the owner of A.'s farm was merely allowed to make a fence, and did not make the jog under a claim of right, and the fence has been continued in that condition—that is, under a permit or license —a prescriptive right to keep the same would never be acquired. But if it has been placed there in defiance of the wishes of the owner of B.'s farm, then it would acquire a prescriptive right in your state in forty years if held under like conditions for that length of time. The prescriptive right would begin at the time the right is held adversely to A. If A. has gained a prescriptive right to use the land for a water-gap, he would have no right to use it for any other purpose. He could not cut any trees off it unless A., or the owner of the farm, has claimed for forty years that the jogged fence was the line. A. could not possibly claim more than an easement in the land to reach the water, and in order to get that he must have claimed and used it for forty years without the consent of B.

Makes Hens Lay Eggs
Dr. Hess Poultry Pan-a-ce-a is a scientific compound that promotes the action of the egg-producing organs through a process following the lines of nature's work—forcing the digestion to active work so all food eaten is quickly appropriated to egg making and flesh making —is sold on a written guarantee to make hens lay even in winter when eggs are high. It is also guaranteed to cure Cholera, Roup, Indigestion and other poultry difficulties.
Dr. Hess POULTRY PAN-A-CE-A
costs but a penny a day for thirty hens. Poultry Pan-a-ce-a has special tonic and curative properties peculiar to itself. Take no poultry food as substitute. 1½ lbs. 25c; 5 lbs. 60c; 12 lbs. $1.25 and 25 lb. pail $2.50 (except in Canada and the Pacific Slope). Instant Louse Killer kills lice on poultry, stock of all kinds and ticks on sheep. Guaranteed. 1 lb. 25c; 3 lbs. 60c. If your dealer can't supply you, send your order to us. Manufactured by
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Also Mfgrs. of Dr. Hess Stock Food.

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Good, Honest Incubators made by Johnson, the incubator man. 3 walls, 2 dead air spaces, improved copper heating system. Will use about ½ as much oil as the old makes. Price $10.00 for 120 egg size, other sizes in proportion. Quick shipments a specialty. Johnson will send you his new incubator and poultry advice book. It shows how to keep your egg records. Write for it today. It's free.
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FREE TRIAL
Prices Right.

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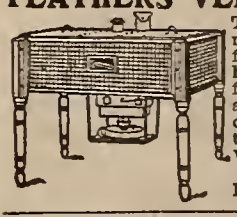
We believe and claim that it's the best incubator ever made. Try it 30 days, if you don't like it you needn't keep it. Absolutely self regulating. Send for trial order blank. Incubator and Poultry Catalog free, with poultry paper one year ten cents.
Royal Incb. Co., Dept. 61, Des Moines, Ia.

FEATHERS VENTILATE BEST



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AWARDED PRAIRIE STATE INCOBATORS AND BROODERS
The United States Government continues to use them exclusively; also the largest poultry and duck breeders. Our catalog will interest you. Send for one.
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Our new 84-pg. revised illust'd book tells how to make it; also how to feed, breed, grow and market poultry for best results; plans for houses, diseases, cures, how to exterminate lice and mites, contains a great mass of useful information for poultry raisers; illustrates and describes 20 leading varieties; quotes low prices on pure-bred fowls and eggs. Send 4c in stamps to F. FOY, Box 10, Des Moines, Ia.

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Our new catalogue contains hundreds of them obtained by BUCKEYE INCUBATOR users in all parts of the U. S. Send for a copy and read the proof. It is free.
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when fed and tended right. Feed Mrs. Pinkerton's Chick Food and make good profits. Write now for free catalogue on chick raising and learn too about our prize winning, pure bred birds.
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of Standard bred poultry for 1904, printed in colors, fine chrome, suitable for framing, illustrates and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, lice, etc. This book only 10 cents.
B. H. GREIDER, RHEEMS, PA.

A THOUSAND DOLLAR EGG
—a touching story of devotion telling how Mandy paid the mortgage and saved the farm Tells how to make money from poultry. Also Egg record and Calendar for 1904. Mailed free. Geo. H. Lee Co., Omaha, Neb.

Poultry-Raising

By P. H. JACOBS

Buff Cochins

THE FARM AND FIRESIDE has been requested by quite a number of its readers to give its opinion regarding Buff Cochins as layers, it being claimed by many that they are not up to the average as egg-producers. Buff Cochins are really very prolific if properly kept. The mistake made by admirers of this breed is in allowing the hens to have as much as they will eat, without making them take exercise. All large breeds, such as Cochins, Brahmas, Plymouth Rocks, etc., are heavy feeders, and readily fattened. They are also contented in confinement as a rule, and are disposed to allow their owners to bring the food to them instead of scratching for a portion. If given only a light breakfast, and forced to scratch and work in litter during the day, allowing no noon meal, and giving them as much as they will eat up clean at night, they will lay and give their owners a profit. Do not feed grain exclusively, and do not feed to make them fat. The Cochins are hardy fowls, and can stand the severe cold in winter better than some breeds, and will lay in the winter season when many other breeds may be waiting for spring.

Milk for Poultry

Milk is the best food for all young animals, including chicks; but as the young animal that is fed on milk grows rapidly, its demand for a larger quantity at each meal increases, and there arrives a time when the animal cannot drink enough for its support unless supplied frequently, as milk contains about eighty-eight per cent of water. If ground grain and linseed-meal are gradually added to the milk as the chick advances in growth, its wants will be more fully supplied. The young chicks should have fresh milk, as sour milk is suitable only for the adults, being injurious to all kinds of young animals. An excellent mode of giving milk is to moisten the ground grain with it. If given in a dish, the milk must be removed daily and the vessel thoroughly scalded and cleaned. Skimmed milk is excellent for laying hens.

Useless Labor

Many well-meaning advisers on poultry matters are disposed to suggest too much work to those having small flocks, or who cannot afford the time to do something that may be really unnecessary. As wheat has been used for experiments with young chicks, and it has been found that when cracked it is one of the best foods that can be used, it is suggested that it should be used in connection with rolled oats or pin-head oatmeal the first week, which would no doubt provide an excellent ration. It is also claimed that boiled wheat for chicks has proved to be better than all other foods. Simply boil the wheat until it is soft, and feed it in troughs to the chicks. It must not be sloppy, but fed as dry as can be under the circumstances. "Make a trial of the boiled wheat, and it will be found valuable in saving many of the chicks that have no appetite," say the advocates of the cooked food; but it must not be overlooked that the fowls naturally prefer hard foods, being well provided for grinding and reducing the hardest substances with the gizzard, which is an organ that should not be deprived of performing its functions if the birds are to be thrifty.

Refuse Meat

Meat will be found equal to any food for inducing hens to lay, but meat should not be fed in excess. The refuse from factories, known as chandlers' scraps, comes in pressed cakes. It is excellent when fed moderately—about a pound a day to twenty hens. If fed in larger amounts, to the exclusion of other foods, it will cause the hens to become overfat, as it contains quite an amount of carbonaceous material that escapes the heavy pressure required to extract the grease. It should be used only as an assistant with the regular supply of grain.

Inquiries Answered

EARLY PULLETS.—J. C. C., Shelbyville, Ind., asks "when early pullets of the large breeds should be hatched." Not later than March 15th for large breeds. Pullets of the small breeds may be hatched as late as May 1st. By hatching the pullets early, they usually begin to lay in the fall.

DOUGLAS MIXTURE.—S. R., West Point, Va., wishes to know how to prepare the well-known Douglas mixture." Dissolve one pound of copperas in two gallons of boiling water, and add a gill of sulphuric acid. Keep in a jug, and add a teaspoonful daily to the drinking-water as a preventive of disease in the flock.

FROZEN COMB.—G. W. S., Youngstown, Ohio, desires "a remedy for frosted or frozen combs, the birds having been exposed to severe cold." There is nothing that can be done, except to endeavor to relieve the pain by anointing the comb and wattles daily with glycerin, and keeping the afflicted birds in a warm place, secure from winds. Such cases often result in complete loss of the comb.

CHRISTINE CALL FEEDING THE TURKEYS AND CHICKENS

Inquiry Answered

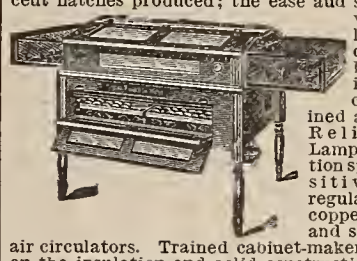
"You Can."—M. S. C., Ritchie, Oregon, writes to inquire "if any one with average common sense could learn how to use an incubator and raise chickens at good profit? I'm tired of setting twelve or fourteen eggs under a hen, having her smash and eat them, then hatch one or two chicks. There's no money in her."

Scores and hundreds of our readers will answer for us, "get an incubator, by all means," and a large proportion of them will add, "get a Reliable."

There are many good reasons for this.

Twenty years of steady improvement and unqualified success has marked the history of the Reliable Incubators and Brooders. These machines have been subjected to the most rigid tests and hottest competition, not only in America, but in every civilized foreign country. In these local, national and international trials the Reliable has outhatched its competitors in hundreds of instances, and rightly bears this hard-earned title, "The World's Favorite."

Distinguished judges have witnessed the high per cent hatches produced; the ease and simplicity with which the Reliable machines can be run. Unbiased mechanical critics have carefully examined and tested the Reliable Safety Lamp, the ventilation system, the sensitive, self-acting regulator, the heavy copper water-tank and sheet-steel hot-air circulators. Trained cabinet-makers have passed on the insulation and solid construction of the case. How well they have agreed is convincingly summed up in the long list of numerous awards received at home and abroad. These flattering decisions are published in the Reliable catalogue for 1904. This is the twentieth annual issue. It is handsomely illustrated with half-tones, and is an invaluable hand-book on successful poultry-raising, besides being a complete catalogue of Reliable incubators, brooders and poultry supplies. It also contains a description of the famous Reliable Poultry Farm, where pure-bred, high-grade birds are raised for breeders.



The Reliable Incubator & Brooder Company, Box B-41, Quincy, Ill., will send this exceptionally complete catalogue to any one who will send five cents to pay postage.

DARLING'S POULTRY SUPPLIES are the better sort of necessary things for poultry—always on trial, never excelled. These in 100 lb. bags: **Chick Feed, $2.50; Laying Food, $2,25; Mica Crystal Grit, 65c; Oyster Shells, 60c; Clover Meal, $2.00.** All f. o. b. Chicago, cash with order. Lice Killers, Roup Cure, etc. We've just put out a large Poultry Supply Catalog. Every good thing priced. Ask for it.
DARLING & COMPANY, Dept. M, Union Stock Yards, Chicago, Illinois.

CHAS. A. CYPHERS' NEW INCUBATOR CO.
Mr. Cyphers, formerly of the Cyphers Incubator Co., Buffalo, N. Y. has severed his connection with that concern and established a new organization under the title of Chas. A. Cyphers Co. for the manufacture of incubators and brooders of a much improved style. It will pay you to write for a copy of his preliminary circular and ask to be registered for a copy of his 1904 catalogue which will be ready about Jan. 10th. Address Chas. A. Cyphers Co., 39-47 Henry St., Buffalo, N.Y.

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"The removable chick tray is the grandest feature an incubator can have," Mr. Ellison, Poultry Judge, said that about the
GEM INCUBATOR
It is a convenient incubator. Easy to clean, simple to understand. Gives no trouble. Write for free catalog.
GEM INCUBATOR COMPANY, Box 35, Dayton, Ohio

True Bred Poultry
Our 75 breeding pens contain the best fowls of the best varieties. We have **All the Standard Breeds.** Our Poultry Farm contains more high grade poultry than any other farm in this country, and is produced from a long line of prominent prize winners. Our COMPLETE POULTRY BOOK, postpaid for 4c. Worth many dollars to you. Write for it to-day.
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Save Two Thirds of the oil and get 20 per cent more chicks By Using **VON CULIN INCUBATORS**
Absolutely the highest grade machine on market and sold lower than any other in its class. Will pay for itself first season by what it saves and bigger hatches. Our "Boiled Down" Catalog proves all claims. Sent free.
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THE MAN WHO KNOWS has built an incubator. He knows it's all right. You can know it, too. We'll send an **IDEAL INCUBATOR** ON THIRTY DAYS' TRIAL. It's a perfect self-regulating hatcher. Send it back if not satisfactory. Big poultry book mailed FREE.
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PETALUMA INCUBATOR COMPANY, Box 74 Petaluma, Cal. Box 74, Indianapolis, Ind.
We pay freight in the U. S.

BUILD YOUR OWN INCUBATOR You can do this easily with common tools and Save More Than Half. Our Complete Book of Plans instructs fully. We sell you at cost all fixtures like Tank, Lamp, Regulator, etc. No Experiment. Handsome Catalogue Free.
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The Best That Was Ever Written.
A man who has devoted 22 years to perfecting incubators has written a book. It tells all that he learned by hundreds of tests with different incubators in his hatchery. It tells in a fascinating way just the facts you should know before buying. We send the book free because the man who writes it is the man who has made the Racine Incubators and Brooders. He shows them as they are today, and tells why you should have one. No one can read this book without wanting this man's machine. Please write today. Warehouses at Buffalo, N.Y., Kansas City, Mo. and St. Paul, Minn. Address
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WHY IT'S ROUND Who ever saw a square hen's nest? We imitate Nature's way in the "Iowa Round Incubator." As result, there are no half heated corners—no superheated centre draughts—no chilling or overheating eggs. Buy a Round Incubator, the Iowa, and get big per cent hatches. Directions simple. Ask now for free illustrated catalogue.
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PROFITABLE "PEEPERS" Welcome sounds—the first faint "peeps" from cracking shells—heard coming from the evenly heated egg chamber of the
Sure Hatch Incubator
Those sounds mean money profit for the owner. A Sure Hatch starts chicks in life with strong lungs, solid bodies and good constitutions. Our free catalogue B 27 tells how. Write now.
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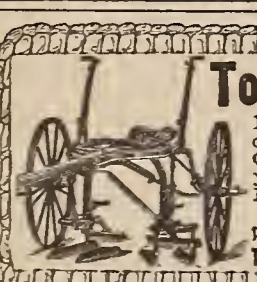

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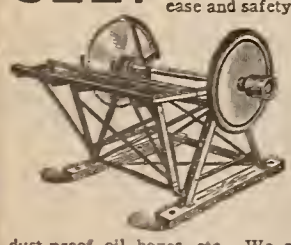

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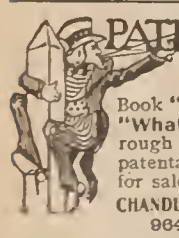

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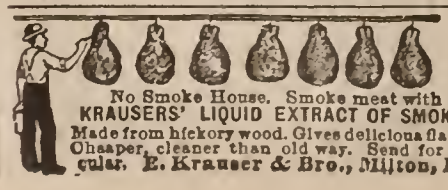

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Around the Fireside

"Countrified"

Do they call you "countrified?"
Let it be your joy and pride,
You who love the birds and bees
And the whispers of the trees!
Trust me, friend of flowers and grass,
Little brown-faced lad or lass,
Naught in all the world beside
Equals being "countrified."

Up of mornings when the light
Reddens on the mountain height;
Hearing how the bird-throats swell
With the joy they cannot tell;
Conscious that the morning sings
Like a harp with unseen strings
Over which the breezes glide;
This is being "countrified."

Roaming far on summer days
Or when autumn woodlands blaze;
Learning how to catch and tell
Nature's precious secrets well;
Filled with sunshine, heart and face,
Or, where branches interlace,
Dappled like the shy trout's side;
This is being "countrified."

What though little fit to pose
In the city's ways and clothes?
There is vastly more to love
In the brown of Nature's glove.
Health and happiness and tan
Are best fashions for a man;
All who near to God abide
Are in some way "countrified."

—James Buckham, in Journal of Agriculture.

The Lights of Home

It is hard to realize that the lamps in use in a household are a distinct moral and ethical factor in its economy, yet I have lately seen the truth of this fact clearly demonstrated.

The children of the Merrick family were growing up rapidly into young men and women, and although the pervading atmosphere of their home life was one of the highest moral and religious tone, one by one each child developed a restless, dissatisfied spirit. The boys found their best pleasure away from home, and the bright faces of the girls took on a look of weariness almost before childhood's unquestioning innocence had faded. Their father had little patience with this development, and thought it only a temporary phase; but as Mrs. Merrick came to feel that the home anchor was dragging its chain, she was grieved and anxious lest she had failed in some way she could not realize, and so she cast about diligently for a reason for this unrest. How long she might have perplexed herself over it would be hard to say if it had not been for a visit from a friend of her school-days—a bright, resourceful woman, with an intuitive gift for sizing up a situation.

The Merrick house was a charming country residence in a thickly settled neighborhood, and Mrs. Harris was genuinely delighted with its surroundings and its air of prosperous plenty. The guest-chamber which she occupied was a pretty nest of blue and white and gold, and one of the girls kept a great glass bowl of Duchess roses on its dresser, lending just the note of rose-color which was needed. Mrs. Harris felt that the week of her stay with her friend and her attractive family was sure to be a season of unmitigated pleasure, but after tea on that first evening she experienced a disappointment. They all gathered for a little while in the living-room, where they sat around with idle, folded hands. Pretty soon one boy after another quietly effaced himself until the three had vanished, and the girls soon stole away to their own rooms. The older people chatted pleasantly for a bit, until carefully suppressed yawns on the part of her entertainers prompted Mrs. Harris to ask to retire early.

Each succeeding day was a stretch of pleasure, and each evening a repetition of that first one, and by the time the chickens were fairly settled on the roost the Merrick house was wrapped in its nocturnal quiet. The day before Mrs. Harris was to go away the two ladies slipped off for a day's leisurely driving through the lovely Southern woods.

As women are prone to do under the spell of intimate companionship, the two proceeded to turn their hearts wrong side out for each other's inspection, and so Mrs. Merrick's perplexity as to a cause for her children's restlessness was laid before her friend, with an earnest plea that she suggest a remedy.

Mrs. Harris laughed softly. "I am quite prepared to hear this, Dora," she replied, "and unless I am greatly mistaken, the remedy will be easy to find. You know how at school we used to puzzle over our problems in algebra until our heads were in a whirl, and then some girl who had scarcely given the lesson a thought would come along and see the difficulty at once. Well, it is often so with the problems of life, and one woman may see in a moment what another might stumble over for years. Now, about this restlessness. You certainly possess every necessary element for a most delightful social life at home. Your girls and boys are intelligent and well-bred. Mattie plays well, and now and then I have heard the boys humming in their rooms in fine musical voices. There are enough of you all to be splendid company for each other in the long evenings, and yet, as you say, you have no sustained social life in the home. Now, it is this evening life which counts for most in the welding process between individuals, for it is when minds are at rest from the cares and interests of the day that we can best become acquainted. Why do you not try it, Dora? You needn't go to bed so early, for I have observed that you do not keep extra-early morning hours."

"Why, dear, I've often wished we could all stay together in the evenings; but when the children were small I got so in the habit of going to bed with them, because I was so dead tired, that now I just cannot feel easy after tea until I get off to bed. But that is no reason why the others should go."

"No?" Mrs Harris' tone was interrogative, and she narrowed her eyes and compressed her lips as she gave her friend a searching look.

"Out with it!" Mrs. Merrick commanded. "I see you are trying to make up your mind whether to be candid or not, and although I have no idea what you are driving at, still I wish to hear your mind."

"Well, then, I think you are making a mountain out of a mole-hill, and attributing the situation to some spiritual lack of your own, some mistake in your training of your children, when I believe the whole situation simmers down to a question of lamps." She paused to laugh at the wonder in Mrs. Merrick's face.

"Yes, lamps! No wonder you all want to slip right off to bed when your house is so dark. You have a ruby-shaded lamp in the hall, which is a beauty to look at by day, but the light it gives is certainly more dim than religious. I notice a lovely violet-decorated lamp in your parlor, and it seems to have a Rochester burner, but I have not seen it lighted—"

"No," Mrs. Merrick interrupted. "It takes such a lot of oil, and is big and awkward to carry about."

"Oil? Is expense an item? Why, I believe oil is about the cheapest thing we can get."

"Yes; but you know what a habit minor economies can become with a man, and it worries Mr. Merrick to see lamps burning needlessly or for us to use the big burner."

"Well, I think the sooner he gets out of that economical habit, the sooner you will become more united in your home life. Just try it, and see, Dora. Get hanging-lamps with large burners for the dining-room, living-room and hall. The little ones will do for the chambers. I need not say anything to you about keeping your lamps clean, for it would be impossible for you to have anything at all in your house which was not well kept; but I surely recommend you to improve your lamps, and not spare oil."

Mrs. Merrick thought about it a good deal after her friend went away, and finally, after a little earnest talk with Mr. Merrick, she acted on the advice. The results were almost immediate. She found that she was not nearly so anxious to get off to bed when it came to leaving a bright room, and as long as she sat there, the girls lingered, too. Little by little they all came to leaving their work-baskets over when they tidied up in the afternoons, and the evenings slipped pleasantly away. One evening Mattie sat down to the piano as she came in from tea, and began playing softly the melody of the sweet old-time song, "A Warrior Bold." One of the boys was in the hall getting his hat to go out, but he drifted back at the sound, and began singing. This was but a beginning, and before long the music meant more to the young people than it ever had before.

Mrs. Merrick had taken no one into her confidence except her husband, and so the children fell naturally into what should always have been the family habit.

Susie Bouchelle Wight.

Around the Fireside

For the "Girls of the Streets"

THINKING that the women and girl readers on the farm might be interested to know of the work one Christian woman is doing for the poor unfortunate girls of the great city of New York, many of whom come from

MRS. WHITTEMORE

quiet, respectable farm homes, hoping to find congenial work in the city, the editor has asked Mrs. E. M. Whittemore, founder of The Door of Hope Mission, New York, to write for us the following earnest and instructive article:

"The Door of Hope"

Through watching the so-called Christian of the day instead of the Christ, much worldliness was entered into, until sorely convicted of its emptiness and the selfishness of such a life, God was earnestly sought in true penitence one night, and he crowded out the love for its fascinations, etc., and in return bestowed a depth of his own compassionate love for a most neglected class—the "girls of the streets."

The surprise at first was great, for there always had been a positive repugnance toward such as they. In ways that time will not permit to relate, the power of God was manifested day by day in this direction, and as the work was started (now over eighteen years ago) I was readily made to see that it was next to impossible to convince the erring girl of even reformation, to say nothing of salvation, without some suitable shelter where she could be properly cared for and daily have it emphasized in a practical manner that through the efficacy of God's love and power her womanhood might be regained.

Many gilded palaces of sin were visited —dance-halls, gambling-dens and subcellars in the slums—the horrors of which at first almost robbed me of sleep and paralyzed my thoughts. But though the pressure was great, God proved equal for all, even to granting faith to trust for the home where with tenderness and love over thirty-five hundred girls have been housed since it was founded, October 25, 1890. A number of those thus cared for are true Christians to-day. Being undenominational, any who desire simply to reform are made welcome, with the hope that while ministering to their physical wants a deep spiritual conviction will take possession of their hearts.

As a rule they are all most susceptible to kindness, and promptly respond to love. Their sensibilities are not so blunted as supposed, nor their hearts so hardened that they cannot be won by genuine or divine consideration and attention.

The heart-question should be more honestly settled among those who ought to be engaged in their behalf, instead of condemning the one they know comparatively nothing about. For instance, one sweet girl just in the freshness of young womanhood, and later saved in The Door of Hope, through false promises fled from her dear, quiet home across the waters, only to find a few days after landing in New York that she was deserted and cruelly deceived, and left a stranger in a strange land. Wearily were the streets traversed in search of a position, while one by one the home trinkets, which in her hasty flight had been gathered together, found their way to the pawnshop, until nothing remained.

Not even a scratch of a pen by way of recommendation could be produced as evidence of her sincerity or integrity of purpose when applying for occupation. Doors were closed in her face, and insults were thrust at the timid, shrinking girl, scarcely nineteen and far from being acquainted with the ways of the world, until one night she could have been seen on one of the corners of the down-town streets shivering with cold, being by this time poorly clad. She hadn't tasted food for ten long, dreary hours; the shoe-leather was almost worn off her feet, and her young heart crushed with sorrow. There she stood wondering what to do, especially as hunger kept asserting itself, and her last cent had gone.

Oh, if the Christian women would but put themselves in imagination for a moment into such a predicament, and solemnly ask the same question, how all preconceived and unjust criticisms would disappear, and under divine pity and love something more would be attempted than is now being done for the reclamation of other equally sad cases. But who cares? Comparatively few. No one but God heard the smothered cry a minute or two later, as with loathing and disgust she finally darted across that street and entered a door which was rarely closed night or day in that district; and a few days later she could have been seen among others more hardened, but not insensible to a kind, gentle word.

Her case was by no means an isolated or hopeless one, for when the opportunity at last presented itself for a far different experience, it was most gladly accepted; and after a few weeks at the Home she developed into a lowly follower of Christ, and since her stay there she has been able to return to her own family or to go anywhere as a respectable married woman.

The very name, "The Door of Hope," furnished in answer to prayer, seems to inspire those who come to us to forsake the past and live a new life. Though in some instances they return to the old paths, we have faith in the belief that the effort put forth in their behalf is never lost, and in memory will be as a beckoning finger to all that is pure and good. Repeatedly some of the most desperate girls have returned, bitterly repentant.

THE DOOR OF HOPE HOME, TAPPAN, N. Y.

On account of the numerous demands for entrance it was thought advisable to purchase a larger place not far distant from the city, and which is now recognized as The Mother Door of Hope, and simply have a receiving office in New York. This is connected with our Evening Mission of the same name at No. 313 West 53d Street, for men and women. Directly over the hall is The Heart's Ease Reading-room and Woman's Shelter, founded by Miss A. N. Smith over a year ago, where many hundreds of poor girls have been lovingly cared for by that faithful little woman and her workers.

Suitable arrangements have very kindly been made so any young girl applying to us can be sheltered for the night. On the following morning, after some earnest words and prayer, she is sent, if willing, to Tappan, our country home. Upon this beautiful place of forty-three acres there is much to remind one of all that is elevating and pure. Various outdoor pursuits are planned, thus giving opportunity to recuperate more quickly than was possible in the former house at 61st Street, New York City.

In order to encourage hope, every girl receives a small amount for her services, and in time we trust sufficient will be realized from the grounds to support the night-work entirely in New York, and to assist destitute cases as God directs.

From the beginning of this movement it has been strictly a faith work, so far as the Home is concerned, and not even my most intimate helper is ever burdened concerning the finances, so that they may not be hampered in any way in their endeavors for those intrusted to us.

THE DOOR OF HOPE CHAPEL, KANGUNDO, BRITISH EAST AFRICA
(Dedicated August 17, 1901)

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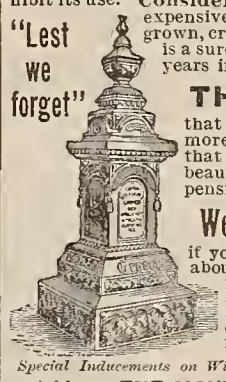
"Lest we forget"



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12 GUAGE

The Housewife

"Civilized Man Cannot Live Without Cooks"

If men are sick, they want something to eat, and the sicker they are the more carefully must their food be prepared.

Invalid Cup-pudding. — Mix one tablespoonful of flour and one egg with cold milk to make a batter, and add a pinch of salt. Boil twenty minutes in a buttered cup. Serve with whipped cream and sugar.

Arrowroot Blanc Mange.—Rub two tablespoonfuls of arrowroot in milk until smooth, and stir slowly into two cupfuls of boiling milk. When it begins to thicken add three fourths of a cupful of sugar, and cook several minutes, stirring constantly. Turn into molds, and cool. Serve with fruit sauce.

Apple Batter-pudding.—A delicious pudding is made by slicing apples into a deep dish, then adding sugar and a little water, and baking until nearly tender. Prepare the batter by sifting together two cupfuls of flour, three tablespoonfuls of baking-powder and a little salt. Beat an egg, and mix it with one cupful of milk, one half cupful of sugar and two tablespoonfuls of melted butter. Beat the prepared flour into this mixture, and pour this batter over the apples. Bake thirty minutes, and serve with either sweetened cream or a pudding-sauce.

Delicious sandwiches are made of whole-wheat bread into which hazelnuts have been stirred before baking. Cut the bread in thin slices, and spread with marmalade. Ella Bartlett Simmons.

A Saint Valentine Supper Menu

Oyster Patties.
Cheese and Walnut Sandwiches.
Chicken and Celery Salad in Tomato-jelly Rings.
Strawberry-jelly Hearts with Whipped Cream.
Charlotte Russe.
Saint Valentine Cake. Kisses. Cupid's Darts.
Fruit. Nuts. Bonbons.
Coffee.

Heart-shaped patty-pans should be used for the oyster patties. Put the oysters in a saucepan with enough of the liquor to cover them. Let them come to a boil, skim well, and add for each quart of oysters two tablespoonfuls of butter, salt and pepper to taste, two or three spoonfuls of sweet cream and one half cupful of rolled crackers. Line the patty-pans with puff-paste, put four or five oysters in each, cover with a thin layer of the paste, and bake in a hot oven for twenty minutes. When done, wash over the top with beaten egg, and set back in the oven for a minute or two. If one does not care to trouble with the puff-paste, make little heart-shaped bread-cases, hollow them out to hold the oysters, spread all over with soft butter, and set in a quick oven until slightly browned. When done, put four or five oysters in each, and five minutes before they are to be passed set in the oven to heat.

TRAVELING-CASE

For the sandwiches melt one cupful of grated cheese, stir in two tablespoonfuls of cream and one half cupful of finely chopped English-walnut meats. Season very delicately with salt and white pepper, and spread over thinly sliced bread which has been cut into small heart-shapes. Cover with another piece of bread, and press lightly together. A little mayonnaise mixed with the cheese is an improvement to some tastes.

Make the chicken and celery salad after any preferred recipe. For the rings, cook for ten minutes half a can of tomatoes with a bay-leaf, two or three cloves, and half a small onion sliced. Strain, and pour boiling-hot over half a package of gelatine which has been soaked for thirty minutes in water enough to cover it. Stir until thoroughly dissolved, then pour into small ring-molds. If these are not at hand, pour into small saucers; keep very cold until time to serve, then invert carefully on individual plates, cut the center out neatly, mix the jelly which has been removed lightly into the salad, then fill daintily into the rings.

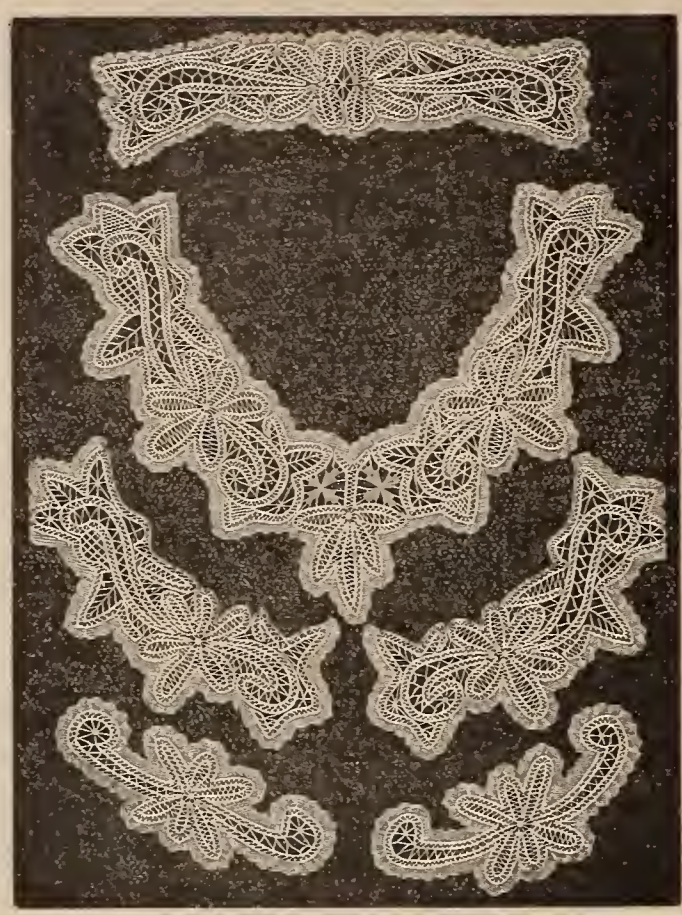
For the strawberry-jelly hearts, bring one quart of syrup or preserved strawberries to a boil, then pour it over one package of gelatine which has been soaked for one hour in enough water to cover it. Stir until dissolved, then pour into little heart-shaped molds. Invert carefully when time to serve, and cover with whipped cream.

A light sponge-cake may be used for the Saint Valentine cake. It should contain a ring, a thimble and a dime. Ice with pink icing, and decorate with rings and hearts of white icing. The cake looks prettier if cut in the shape of a large heart, or it may be baked in a heart-shaped pan, if convenient.

Cupid's darts are not darts at all in shape, but the name is delightfully suggestive, hence it has been borrowed for these delicious morsels. They are made as follows: Roll puff-paste thin, sprinkle lightly with finely chopped blanched almonds, then with red sugar; press the rolling-pin lightly over again, and cut in strips not over two inches wide. Wind from the small end of the pointed tin tubes called lady-lock sticks, having each layer slightly overlapping the preceding one. Set the tubes across a baking-pan, and bake in a quick oven until done. Remove from the oven, and push the paste from the tubes. Keep in a cold place. Just before serving fill them with whipped cream which has been sweetened and flavored with strawberry or lemon. Mary Foster Snider.

Traveling-Case

A convenient case for carrying darning cotton and needles is made of ribbon—fifteen inches of wide satin ribbon, with pieces of narrow ribbon of the same shade, to hold the cotton in place. Black and white cotton are drawn through, and needles of different sizes arranged above, as illustrated. M. W.



A WAIST SET

A Waist Set

The waist set, consisting of a collar, cuffs, sleeve-ornaments and front bertha is made in white silk moverenne braid, and worked with white silk twist. When completed, sew Duchesse lace around the edge for a finish. O. M.

Turnovers

Very pretty and serviceable turnovers are made of cream scrim done in cross-stitch. Make the collar twelve inches in length, and the cuffs eight inches. The hems should be at least one fourth of an inch deep, and hemstitched all around. Work the design above the hem in colored cotton floss. Finish the tops with narrow strips of India linen. Different designs in cross-stitch are given in the first two illustrations.

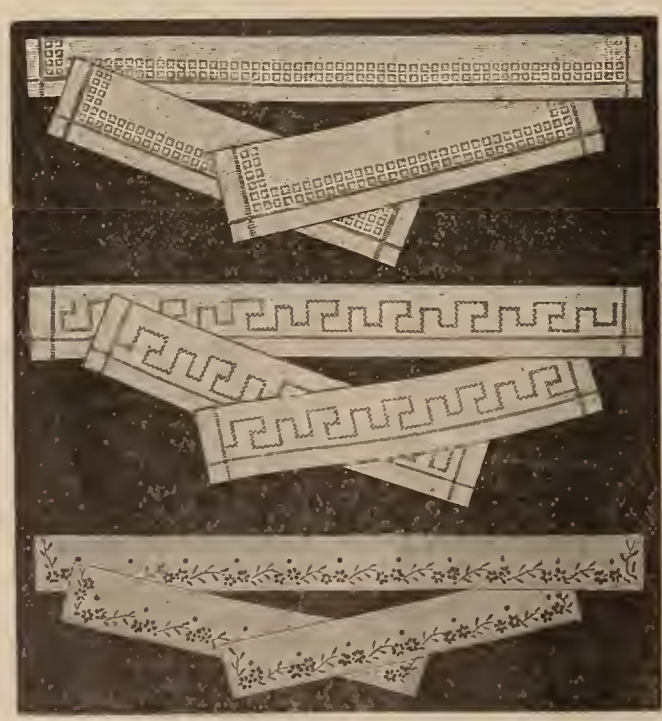
The third set of turnovers is made of white linen, and trimmed with narrow braid trimming. One and one fourth yards of the trimming are necessary to finish one set. Embroider the dots with fine cotton floss of the same shade as the trimming used.

Marie Wilkinson.

Favorite Vegetables of Other Lands

In traveling through the different foreign countries one is impressed with the strange customs and manners of the people, and one also naturally becomes interested in the new dishes of food set before him. Some of these dishes prove pleasant and appetizing to his taste, others are unpalatable, and still others execrable. Every land has its favorite vegetable and vegetable dishes, and it is interesting to note them.

One of the typical scenes in Hawaii is the natives making their favorite dish, poi, which is made from a vegetable called taro. It resembles our turnip in size and shape, but is cultivated under water. When the taro-plant is simply cooked as we cook our vegetables it is very palatable, but when made into poi it is anything but pleasant to our tastes. Poi is made by boiling the vegetables, then removing the skins. They are then placed in large wooden trays, and pounded with stone pestles. A little water is added at intervals, and the pounding continues until a dough-like substance is produced, which usually takes over an hour. This dough is placed in a wooden bowl and allowed to stand until fermentation sets in, when to our unaccustomed palates it tastes like sour paste. There are three kinds of poi—one-fingered, two-fingered and three-fingered, named according to its consistency. If it requires three fingers to convey it to the mouth, it is three-fingered poi, and so on. This vegetable is healthful and nutritious, and is especially valuable to those suffering with dyspepsia and other stomach troubles.



TURNOVERS

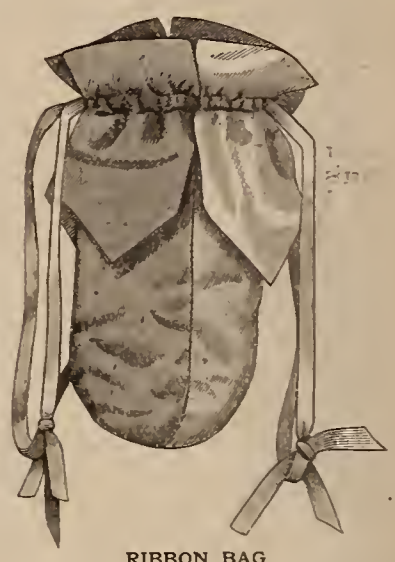
The Russian peasant is especially fond of mushrooms, which grow by the million on the steppes. There they are the food of the poor; here they are one of the delicacies of the rich. They are eaten fresh, dried, preserved in oil or vinegar, or pickled in salt, and they constitute almost the sole diet of the people for weeks together, especially during the long lenten fast of the Greek Church.

Cabbage is another favorite vegetable of the Russians; it is the staple stock in their popular and universal soup, borsht. This soup is a wonderful mixture, being composed of a great variety of vegetables and the shreds of as many kinds of meat as are available. Although we would consider this a rather coarse dish, yet it is really palatable and nourishing.

The Turk is a great vegetable-eater, and his favorite one is the tomato. He does not care for it sliced raw and served with vinegar or dressing, as we do, but likes to combine it with other vegetables, such as egg-plant, another favorite, beans, and even with onions. Tomatoes, onions and bread or biscuit arranged in layers, with plenty of butter for seasoning, and baked in the oven, is considered delicious. Tomatoes are usually added to pilau, the national dish of Turkey. Rice is the foundation of this dish, and the tomatoes and butter are added; but most often the rice is boiled in tomato-juice, and plenty of butter used as seasoning.

When traveling through Japan it is not difficult to find out what is the Japanese favorite vegetable, for one sees it in the vegetable-markets, piled up in the fields, on the roofs of houses, on ropes stretched between trees, in fact almost everywhere he goes. The daikon is a sort of radish, and there are two varieties—the one very long, and the other the shape of a turnip but much larger. The daikon is made into a fermented pickle, which is always found on the Japanese menu. It is very white and looks good, but alas! appearance is very deceiving in this case. Sweet-potatoes are also much used, and they are sold raw in the markets, or smoking-hot from the pots and braziers on the streets. Lima beans and mushrooms are their favorite soup vegetables.

In Egypt the cucumber man is a favorite, especially with the children, and a great green cucumber is almost as rare a bit as a fat, juicy sugar-cane. The very babies cut their teeth upon them. Among the lower classes the cucumber is almost the only vegetable eaten.



RIBBON BAG

It is needless to speak of the favorite vegetable of the Germans, since it has become well known through their favorite dish, sauer-kraut.

Some of the foreign vegetable dishes might well be adopted by the American housewife, being appetizing and inexpensive, while others can never prove satisfactory to her unaccustomed tastes.

Pansy Viola Viner.

Ribbon Bag

This dainty work-bag is made of green and white taffeta ribbon. A yard of each is required, also two yards of narrow ribbon (green or white) to form the ties. Cut each piece of the wide ribbon in half, and "point" the ends. Sew these points together, colors alternating to form a square bottom for the bag. Sew the edges of the ribbons for about seven inches, to close the sides. Finish the top by turning the ribbons back on the outside and pointing the ends. The narrow ribbon is run through the bag both ways, making it very convenient to open and close. M. W.

Gas-tronomic Wisdom

Study to discover the hottest and coolest places in the oven, then watch things while they are baking, and turn about until the rising is finished and the cake or bread is level, then leave to brown. Remember, though, that all movement made of such food must be the gentlest touch possible. If you jerk a cake or muffin suddenly it is ruined.

Never use white of egg for a meringue, cake or anything you wish particularly light, if the merest speck of yolk gets into it. Put it away for coffee or some other use. It might be whipped for hours and it would not froth.

Do not leave the dripping-pan over which meat has been broiled covered with fat in the bottom of the lower oven. It will be forgotten, and when the oven burners are lighted there will surely be a blaze of burning fat.

Be sure that the stove you buy has an asbestos-lined oven. If it has only sheet-iron sides, more heat will be thrown out into the kitchen than is retained in the oven. A good asbestos lining will give you a cool kitchen and a hot oven. — A. B., in Good Housekeeping.

The Housewife

"The Village Clock-Maker"

THE picture reproduced on this page is a copy of Mr. Henry Mosler's famous painting, "The Village Clock-Maker." The picture, as the costuming and setting suggest, was painted in Paris, France, in 1884, and was exhibited in 1885 at the Paris Salon. It is now in the Art Museum at Cincinnati, Ohio. Its subject is homely, being a faithful portrayal of the humble shop of a village clock-maker. But therein is the genius of the artist more strikingly apparent, for what could be more realistic, more picturesque, if you please, than the group at the clock-maker's bench, or counter?

The smith, by right of the title, is the most prominent figure, and we can almost hear him speak, as with his magnifying-glass he examines the clock brought to him for repairs. The clock itself, being of the pretty Swiss pattern, is an attractive object. The pose of the little girl, as she leans eagerly forward and watches the smith, is thoroughly characteristic of the curiosity of a child about a clock. The mother and child form a distinctly beautiful picture, perfect in every detail, and the old dame in the background, with her sinister expression, forms the one touch of shadow needed to bring out the sunshine of the whole.

Mr. Henry Mosler, the man whose gifted brush brought into being "The Village Clock-Maker," is an American by birth, though of German-Jewish extraction. At the early age of ten his drawings attracted the attention of Cincinnati (Ohio) artists. One of them, Mr. James H. Beard, became young Mosler's first serious teacher in color and form. When Major Anderson visited Cincinnati in 1861, immediately after the fall of Fort Sumter, Henry Mosler made a sketch of the public reception given him. He sent this sketch to "Harper's Weekly." It was immediately accepted, and Mr. Mosler was engaged as special artist in the West for that journal during the war.

In May, 1863, he went to Paris, where he was destined to receive later the highest honors that France could bestow upon a foreign artist. Three years later (1866) the talented young man returned to his native land. During his stay in America his time was devoted to the painting of special portraits. However, he found time to paint "The Lost Cause," which represented a Confederate soldier returning to his home, only to find it deserted, the ruinous house covered lovingly by flowering vines, and the garden a tangle of weeds and roses growing wild.

In 1874 Mr. Mosler recrossed the ocean, going this time to Munich, where he devoted himself enthusiastically to his beloved work. During his three years in Munich Mr. Mosler won a gold medal of the Royal Academy. In 1877 he returned to Paris, and hung a number of pictures in the Salon there. In 1878 he sent two pictures—"The Quadroon Girl" and "Early Cares"—to the Salon. Both were accepted. His picture "Le Retour," or, as it is called in America, "The Prodigal Son," was purchased by the Minister of Fine Arts of France for the Luxembourg Museum. This was a great honor, as it was the first picture the French government had purchased from an American artist. In 1884, as has already been noted, he painted in Paris the picture which is illustrated on this page.

Mr. Mosler has been continually busy, each year adding to the number of his canvases and the brightness of his fame. It is with much pleasure that we present to our readers this copy of his "The Village Clock-Maker."

L. K. W.

"THE VILLAGE CLOCK-MAKER"—BY HENRY MOSLER

Boston Brown Bread and Baked Beans

The following recipes come from New England, and the genuine Boston article will result from a faithful following of either recipe.

BOSTON BROWN BREAD TO BE SERVED WITH BEANS.—Sift together one cupful of rye-meal, one cupful of Graham flour, one cupful of yellow corn-meal and one teaspoonful of salt. Beat three fourths of a tablespoonful of soda into two cupfuls of sour milk, then add the milk and two thirds of a cupful of molasses to the sifted meal. Butter well a five-pound pail or baking-powder tins with lids, and fill two thirds full. Set the tins in a kettle of boiling water, letting the water come half way up the tin. Cover the kettle closely, and keep boiling constantly for three hours, when the kettle can be moved to the back of the stove, and stand for two hours to ripen the brown bread. Before serving turn the bread out on a platter, and set in a warm oven to dry.

BOSTON BAKED BEANS.—Soak two quarts of small dry beans over night; in the morning drain, add one quart of fresh water, and set on the stove to simmer until the skins can be blown from the beans. Drain again, and put the beans into a covered bean-pot, adding one tablespoonful of molasses, one half teaspoonful of dry mustard, one teaspoonful of salt and one fourth of a pound of fat salt pork. Cover the beans with boiling water, and set in the oven to bake all day. Keep the beans covered with water until late in the afternoon, when the cover can be removed and the water cooked down to give the beans a nice brown. Serve on a platter, with the pork in the center.

TO USE STALE BROWN BREAD.—Put some brown bread through a meat-chopper, also a cake of sweet chocolate, keeping each separate. Whip stiff one half pint of cream. Place in a dish a layer of the bread-crumbs, then some of the chocolate and a thin layer of cream. Repeat this, and pile the remaining cream on the top. This can be prepared in individual glasses.

MARIE WILKINSON.

Church Functions

A very successful church social was recently given in our town by the ladies of one committee. It was called a "Seven Social." It may be held on the seventh, seventeenth or twenty-seventh day of the month at seven o'clock, or at an earlier hour, as five thirty-seven. The admission was seven cents; every seventh person was admitted free.

We arranged booths, from which the following refreshments were served: Brown bread and Boston baked beans, seven cents; sandwiches or doughnuts and coffee, seven cents; pie and cheese, seven cents; ice-cream or sherbet and cake, seven cents; or the complete bill of fare, twenty-seven cents.

Small tables with lunch-cloths were arranged about the hall for the comfort of the guests. Those who preferred were served by the waitresses; others, taking a plate, napkin and fork, visited each booth, and purchased what refreshments they desired.

A short program was given after the supper. Jean Ingelow's "Songs of Seven" was read and acted in pantomime, beginning with the child of seven years, followed by the girl of fourteen, the young girl waiting for her lover, the mother and her four children, the widow, the mother giving her daughter in marriage, and the mother mourning for her lost husband and children. This was made very effective by appropriate costumes and flowers. Several solos, and music by a mandolin club, added much to the enjoyment of the audience.

Another feature was a bazaar from which serviceable and fancy articles were sold.

Financially it was one of the most successful socials of any that were held during the year.

A RAILROAD-RESTAURANT SOCIAL

The idea of this social is to serve refreshments upon the plan of a restaurant. Counters containing such articles of food as would be found in a restaurant are arranged. Baked beans, potato salad, sandwiches, doughnuts, cake, pie and cheese, coffee and milk are usually served. The plates, cups, silver, napkins, etc., are placed so each guest can easily secure them, and then he is at liberty to select his food at each counter, paying the stated price. Signs may be hung out which will cause much laughter, as "If you do not want what you see, ask for it," etc.

A BAKING

This plan of selling home baking has been tried with success in some towns. The ladies of the church may be divided into committees, each committee holding one sale. Brown and white bread, pies, cakes, etc., are usually in demand, especially if there are families in town that do light housekeeping.

A TURKEY DINNER

A turkey dinner with all its accompaniments, to be given by all the ladies of the church, is almost sure to be a success. Such a menu as the following is good:

Tomato Bisque Wafers
Mashed Potato Squash Turnips
Roast Turkey Stuffing
Cranberries Pickles
White Bread Brown Bread
Coffee
Mince Pie Pumpkin Pie
Cheese

A plum-pudding may be substituted for the last course.

This dinner was given early in the fall by one of the churches in a town of eight hundred inhabitants, and netted over fifty dollars.

J. M. PHELPS.

To Wash Appliqué Trimming

This beautiful trimming can be cleaned very satisfactorily in the same manner that dainty lace should always be washed. Get a round, smooth bottle, and wrap the fabric around it so carefully that there will not be a wrinkle in it. Now baste it carefully, to keep it in place—a stitch here and there will be sufficient. Then wrap a piece of white muslin around the trimming, and sew it on quite firmly, but in such a manner that it can easily be removed. Tie a stout cord to the neck of the bottle, by which to hang it up out in the bright sunshine. Wash this bottle as you do any of the other white clothes, and boil it with the rest, put through the "blue water" and through a very thin starch, then hang on the line by the cord.

Any delicate lace or trimming can be treated in this manner, and will come out looking clean, fresh, smooth and new.

ELLA BARTLETT SIMMONS.

New Use for a Turkish Towel

A clever friend of mine wished to attend a reception hurriedly, and looked at her pretty old dress ruefully. The white silk vest and collar and cuffs wouldn't do at all! Then a sudden thought came to her. A white Turkish towel was demolished, a box of rope silk depleted, a couple of hours' dressmaking, and the dainty tan-colored batiste, with its touches of black velvet, had a new vest, a new collar and cuffs that looked for all the world as if they had come from some Turkish embroidery-shop, and the dress was a creation charming indeed.

With her inspiration to guide me I have made some pretty turn-over collars for a winter dress, with cuffs to match. Take rather wide strips of a Turkish towel two inches deep for the collar, three inches deep for the cuffs. Buttonhole the edge with white rope silk, and run rope silk in and out under the rough surface. For Turkish effect take strands of different-colored silk—a blue, a yellow, a black, a red, a green, etc.—or the silk may be used in solid tone to match any gown. The white roughness of the towel receives such decorations prettily, and an elaborate effect is easily obtained.

Other uses of a Turkish towel are numerous. A wall-pocket to hang on the bath-room wall is made of one, the bottom turned up and stitched in place like a shoe-bag. This is a convenient receptacle. Put extra soap in one pocket, a sponge in another, or extra wash-cloths, and a pair of bedroom-slippers in the third.

Any mother with a young baby will quickly understand how convenient one or two aprons — simply Turkish towels put on bands—will prove in giving the baby its bath, and the older flannel ones will be laid aside.

A charming bedroom dressing-sacque, designed for use during a shampoo, can be made by turning over one corner of each end of a towel (the upper corners), and stitching them in place, tacking a ribbon bow on each side. These make the sleeves, and if wished, ribbons can be sewed on the edge of the towel to draw the neck more snugly together.

A Turkish-towel splasher and wash-stand cover can be made of two small towels. A spray of water-lilies embroidered on the rough surface is most effective. This can be done in many ways. Perhaps the simplest is to outline the leaves in white rope silk on the white surface, couching the lily-pods of green flannel on with long-and-short stitch, and the center of the lilies a circle of yellow flannel.—Marjorie March.

How Eggs Absorb Odor

Very few people realize how sensitive the egg is to bad odors, and many even think that the shell is a sufficient protection against any contamination from without. But the shell is porous, and the albumen, or white of the egg, quickly absorbs and holds the flavor of any bad odor to which it is exposed, as it also does any bad flavor in the food given.

As the hen seems to be almost devoid of the sense of taste, care should be taken to give her only well-flavored food, and the feeding of partially decayed meat or fish, onions and other smelling food, should never be allowed when hens are laying. But care also needs to be taken to have the nests clean and sweet, and never to put the eggs where they will be tainted by codfish, kerosene or anything else.

If it is found necessary to use kerosene on the nests, do it at night, that the odor may evaporate before the hens use them. But a better way is to get clean boxes from the grocer when the old ones get so that they need to be kerosened. Eggs packed in new pine boxes when sent to market often acquire a flavor of turpentine.—Farmers' Monthly.

Natural Food Elements

Housekeepers who wish to know the natural food elements and the foods which contain them will find this table valuable:

FOOD SUBSTANCES RICH IN NITROGEN.—Cheese, beans, peas, eggs, meats, milk.

STARCH.—Rice, wheat, corn, oats, barley, rye, beans, peas, potatoes.

FAT.—Cheese, meats, eggs, milk.

SUGAR.—Molasses, syrups, fruit, preserves.

SALTS, ACIDS AND FLAVORS.—Vegetables, fruits, green radishes, condiments.—What to Eat.

Selections

Facts of Note

MYRON T. HERRICK became governor of Ohio on Monday, January 11th. The ceremonies were very gorgeous and impressive.

Six thousand nine hundred and seventy-three persons lost their lives in railroad accidents which occurred in the United States during the year 1903.

Ex-Governor Foster, of Ohio, was stricken with paralysis at Springfield, Ohio, on January 8th, and never regained consciousness, dying January 9th.

Ex-Governor John Young Brown, of Kentucky, died at Henderson, Ky., after a lingering illness. He had reached an advanced age.

On January 29th, "McKinley Day," carnations were worn all over the country in honor of the memory of our martyr president. The carnation was Mr. McKinley's favorite flower. January 29th was chosen on account of the fact that it was his birthday.

Pigs and Pippins

The following article from the pen of Otto Carmichael, which appeared in a recent issue of the Cincinnati "Commercial-Tribune," will find many interested readers:

"Residents of Leesburg, Va., were excited during the holidays by the telegraphic request from the White House for seven shotes to be forwarded at once, dressed and ready for use.

"Leesburg is in the center of a famous pig-raising district, and orders for dressed porkers are not rare, but a summons for seven by Theodore Roosevelt, President of the United States, was sufficient to stir the lively interest of the thirty-five hundred inhabitants.

"The order was ticked off the wire at eleven by the clock in the morning, and before the sun had set seven fine porkers, with 'Mr. Roosevelt, White House, Washington,' on cards tied on the fore feet, were on their way to Washington. These curious folks of Leesburg have never been able to learn what special occasion demanded so many pigs, and probably they never will know. However, they have a special reason for rejoicing.

"Not far away is the town of Charlottesville, where King Edward VII. gets apples. He demands a special kind of Albermarle pippins, and a small orchard near this little town in Virginia is the only place where these apples will grow. Representatives of great houses in England have come to the town for the same apples from the same orchard, but these agents have all been informed that King Edward has a standing order for all these apples. But the pippins from other near-by orchards are almost as good, and demand an unusual price on account of the preference of King Edward.

"Leesburg now feels that it can bear with equanimity the proud boast of the neighboring town.

"It is interesting to note how the royal family found out about the apples that grow in this little orchard.

"Not far away is another Virginia county-seat, where live a number of scapegrace sons of noble English families. There are a score or more of these discredited representatives who have been located in the country round about. Allowances come to them quarterly. For a few weeks after the receipt of this money there are gay times. Then the cash runs low, and the reckless exiles settle down to cornbread and bacon, with whisky and poor cigars, until the arrival of the next remittances. A great many years ago one of these exiles sent a barrel of apples to Windsor Castle. The steward of Queen Victoria made an investigation as to the orchard, and since that time the harvest of pippins from those trees has gone across the ocean."

A Question of Surgery

Mrs. Wagger—"Have you moved into your new house?"

Mrs. Changer—"Oh, yes; but we are not settled yet. The carpenter has to make so many alterations."

Mrs. Wagger—"I thought everything would be just right."

Mrs. Changer—"So did we. But we found that scarcely one of our old carpets would fit."—Harper's Bazar.

$100.00 for a Name

Can't you suggest an appropriate name for our beautiful New Prize Picture? You may be the lucky person to win $100.00 cash. See page 22.

$24.75 buys our "Duchess" top buggy, exactly as shown in cut, with top, curtains, shafts, anti-rattler, cushions nicely trimmed. Best value ever offered. If you want a vehicle of any kind, write at once for our vehicle catalog.

$35.95 buys our rubber tire top buggy, exactly as shown in cut; complete in every way. Greatest offer ever made in a guaranteed rubber tire top buggy.

$30.50 buys our combination spring wagon, with large body, two seats, shafts, etc.

$4.25 buys our No. 100 single buggy harness, with over or side check, 1 in. traces, complete with one hitch rein. This and others described in catalog.

$14.90 buys our No. 190 double driving or carriage harness. 1½ in. traces, handsome pads, over or side checks, two hitch reins. Collar extra $1.40.

$43.90 buys our "Solid Comfort" phaeton, exactly as shown in cut, large handsome lamps, wide fenders, top, shafts, etc. Spring cushion and back.

$41.25 buys our large two seated family carriage; without lamps, fenders and top. Price with top, fenders and lamps, $54.95. For full description of this and other styles, write for catalogue.

$24.95 for our gentlemen's driving wagon, with stick seat, exactly as shown in cut, with shafts.

$6.85 buys our No. 107 single buggy or carriage harness, collar and hame style, with over or side check. 1 in. traces; collar extra, 75 cents.

$17.00 buys our No. 317 heavy double team harness, with 1½ in. traces, 18 ft. lines, 1½ in. pole and breast strap, with snaps and slides, complete with two hitch straps. Collars extra $1.50. Write for free catalogue.

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$50

Split Hickory Special TOP BUGGY $50

For Only

Made of Split Hickory—not sawed—guaranteed for 2 Years and good for 20—the handsomest, strongest, most stylish top buggy you ever saw, and well worth $75. We make this vehicle to your order—make it for you. No dealer or agent can buy one a cent cheaper than you can. That's your advantage. We furthermore ship the buggy to you on

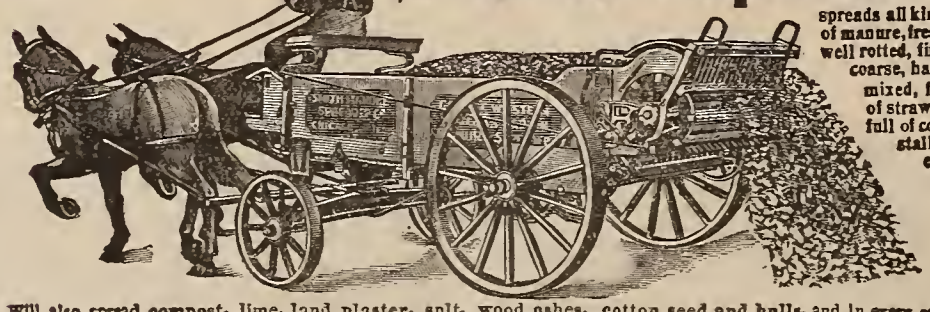
30 DAYS FREE TRIAL

to have you give it a thorough test and trial before you call it yours. We want to tell you all about this buggy and our plan for supplying you with one direct from our factory. There's a large picture and full description of the buggy in our Free 186-page Catalogue of Split Hickory Vehicles and Harness. Send for that to-day. Note: We carry a full line of high-grade Harness, sold direct to the user at wholesale prices.

THE OHIO CARRIAGE MFG. CO., (H. C. Phelps, President) 2216 Sixth St., Cincinnati, O.

Made for the Man Who Wants the Best.

The Great Western Endless Apron Manure Spreader



spreads all kinds of manure, fresh, well rotted, fine, coarse, hard, mixed, full of straw, full of corn stalks, etc.

Will also spread compost, lime, land plaster, salt, wood ashes, cotton seed and hulls, and in every case do it quicker, better and more evenly than it can be done by hand. Spreads as much manure in one day as twelve men can load and spread by hand and the job is much better when done. Spreads the largest load a team can haul in 2 to 4 minutes. It makes the same amount of manure go three times as far and at the same time produce better results.

REGULATED to spread much or little while in motion. Puts it on thick on poor spots—8 to 25 loads per acre. **ENDLESS APRON**—always ready to load. No turning back into position with crank.

COMBINED HOOD AND END GATE keeps manure away from beater while loading and acts as hood in spreading. Catches all flying sticks, stones, etc. Front wheels cut under, and machine can be turned in its own length. Made in two styles and four sizes. Capacity 30 to 70 bushels. It saves time, labor and money and will double the crops. Makes all manure so fine and spreads it so evenly that it is immediately available for plant food.

LARGE CATALOGUE 10 by 13 inches, with 8 large cuts shows the spreader perfectly and describes it fully. Tells also how to apply manure to secure best results. Mailed free.

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"LEADER" Road Wagon — Imitation leather trimmed; carpet, wrench and shafts; just as illustrated. Write for further description.

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"CHALLENGE" Buggy—24 in. body, cloth trimmed; top, back and side curtains, storm apron, carpet and shafts. Write for details.

We also have better grades up to the very best and most stylish that can possibly be put together.

VEHICLE CATALOGUE FREE. Send for it today. It will give particulars about the above work. It also illustrates and describes the newest and best line of Runabouts, Stanhopes, Buggies, Phaetons, Surreys, Carriages, Carts, Spring Wagons, etc., ever quoted direct to the buyer. It explains the difference between good and unreliable work—between the hand-painted and the dipped buggy—and also explains our Guarantee of Satisfaction and

30 Days' Trial Offer.

Send a postal today for our Vehicle Cat. No. E1.

Montgomery Ward & Co.
Chicago

A special circular quoting our entire line of Sleighs, Sleds, etc., will be sent at the same time, if you request it. 40

"Big Four"

The

World's Fair Route

From the

Leading Cities of

Ohio, Indiana and Illinois

To

St. Louis

Write for Folders

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CINCINNATI, OHIO

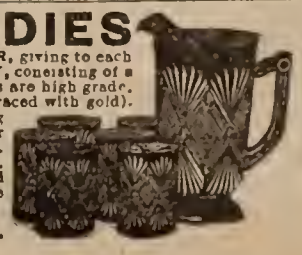
RUPTURE

Cured by the Collings System. Send your name and address to Capt. W. A. Collings, Room 129, 26½ Public Square, Watertown, N. Y., and he will send you **FREE BY MAIL** a trial of his wonderful treatment that cured him and has cured thousands of others. Do not delay, but write to-day. Capt Collings had a remarkable experience with rupture and will gladly recite the details and send a free trial. Write him.

FREE DINNER SET TO LADIES

For Selling only 10 one-pound cans **QUEEN BAKING POWDER**, giving to each purchaser of a can, **FREE**, our new cut-glass pattern **WATER SET**, consisting of a **PITCHER AND SIX GLASSES**, just like cut. (These Dinner Sets are high grade, full size, and each piece hand decorated in four colors and heavily traced with gold).

We also give **FREE, Skirts, Waists, Wraps, Furniture, Sewing Machines**—anything you want—for selling our groceries. We also give cash commission. Write today for our Illustrated Plans offering everything in Glassware, Chinaware, Graniteware, etc. to customers and Premium Lists for selling; it will pay you. Largest house in the World. Many thousands pleased lady agents. **YOU RISK ABSOLUTELY NOTHING**, as we send you the goods and premiums you select, pay freight, and allow you time to deliver the goods before paying us. Write today; you will be pleased. Address



AMERICAN SUPPLY COMPANY, 900-906 N. Second St., Dept. 25, ST. LOUIS, MO.

The Soul's Solitude

BY LIDA KECK-WIGGINS

The song thy spirit sings to thee
Cannot be heard by alien ears;
That song was meant alone to be
Thy message from the other spheres.

When thou dost see a sunset's glow,
And thrill before its majesty,
Its beauty to no soul will seem
Exactly as it seems to thee.

For thee alone thy spirit sings
Its undertone of joy or woe;
For thee alone the message brings
Thou only canst its meaning know.

True, friends who know thee as thou art,
And mark thy doings day by day,
May sometimes dimly read thy heart,
And understand each word and way.

But down within thee still there lies
A self, an ego, all thine own,
A sacred thing from human eyes,
Whose thoughts none e'er have heard or known.

'Tis here when thou art tired of sin,
And all thy daily paths are trod,
That thou mayst shut the silence in,
And rest thee on the heart of God!

Jesus, the Soul's Radium

THE discovery of radium is important, because of its character and value. Intense interest is manifested in this product, because of what it is and the revolutions it promises to make. Jesus declared himself the light of the world, and this statement becomes profoundly significant when it is contemplated by comparison with this most recent discovery. Radium promises to be the triumph of light. Men unhesitatingly assert that it will conquer the physical darkness, turn night into day, illuminate the Arctic regions, and the whole earth will be filled with a continuous light. This also is true of Jesus Christ, the light of the world. He is destined to conquer sin in the world, for he is the triumphing Christ. The whole earth shall be filled with his glory. The kingdoms of this world shall become the kingdoms of our Lord and his Christ, and he shall reign for ever and ever.

A second characteristic of radium is its health-giving power. It conquers disease, produces health, and is thus a life-saver. Cancer, consumption, and even some forms of blindness, are yielding to its influence. It will not only heal, but will prevent disease. Jesus is the life-giving light. He is able to save unto the uttermost. He is the fountain opened in the house of David for sin and uncleanness. He is the light of life to any soul who receives him.

A unique property of radium is that of imparting the light-giving power to objects with which it comes in contact. Place a piece of radium in a room, and every object in the room becomes luminous and gives forth light. In like manner, Jesus illumines every human soul with which he comes in contact. He declared, "Ye are the light of the world." This becomes true of men only after they have been with Christ. A man in whom Christ dwells, and who is his life, will show forth to the world the true life of righteousness and the "new life of undying hope." Again, it is asserted that radium will never lose its light-giving power. It never grows less, will always abide, and so will give forth light for ever. We now know something of what the Revelator means when he says: "And the city had no need of the sun, neither of the moon, to shine in it: for the glory of God did lighten it, and the Lamb is the light thereof." "And there shall be no night there; and they need no candle, neither light of the sun; for the Lord God giveth them light: and they shall reign for ever and ever." Jesus Christ is the abiding light. "The Son abideth forever."

Finally, radium has an inconceivable destructive power. It is claimed that a single pound of it in one lump has sufficient explosive power to shatter the earth into fragments. There is the "wrath of the Lamb;" and it is presumptuous to deny its infinite power. The Scriptures abound with graphic pictures of the terrible scenes which follow upon the visitation of his anger; and as one has recently written: "Nor can we say that the Judgment Day is a mere figure of speech. We know the future well enough to say that there must come a time when there shall be an infinite readjustment in human lives. The lake of fire may be a figure, but the terrible consequences of sin are as fact."

Radium is not yet produced in such quantities as to be of value to the whole race. Jesus Christ is the light of the world. "Whosoever will," is the world-wide invitation. The "I Am" hath said, "I am the light of the world." No man need wait for his soul's coming light. He is already here.—Rev. J. W. Sneath, Franklin, Mass., in the Ram's Horn.

The Restfulness of Worship

People who go to sleep in church are not the only ones who ought to be refreshed by worship. That is what church is for—to worship God. And the sermon must not perplex by metaphysical theological problems or be so tedious that it becomes a "drool." The pulpit is not a lecture-platform, nor is the choir-box a grand-opera stage. The element of worship in the Sunday service is the most important one. After a week of fret and worry, the church service ought to come as a sweet, healing balm. The worship should be comfortable—just as when, after an endless day of fever, evening comes, and a cool hand changes the hot pillow and caresses the hot head. The Roman churches make a specialty of worship, and to step into a Roman church is like retreating into some Arcadia. Those who have listened to the organ-echoes that reverberate through Notre Dame can understand the feeling of rest and of renunciation of the world that comes from such communion—heart to heart with the Creator. The spirit of modern times, however, demands more than the simple ceremony. Therefore the sermon, which should be encouraging, convincing and appropriate. So long as there is sorrow and remorse, so long will kind words and religion heal the wound. The church that tries to satisfy the longing after peace will never deteriorate into a place of entertainment. —Western Christian Advocate.

Is My Heart Stopped?

Spurgeon started up once at night in great fright. He had just dreamed that his heart had stopped beating. His watch was within reach, and on looking at it he discovered that it had stopped running, apparently at the very moment when he had had the ugly dream. His own explanation—which was probably the correct one—was that the moment the watch stopped his ear had noted the change, and brought on the dream. And the great preacher, with that readiness which always characterized him for using common things as illustrations of great truths, seized upon this incident, and said, "How I wish every Christian, whenever he feels the works of piety are not carried on by him, would start up in fright, and say, 'Is my heart stopped?'" There is another truth which the story illustrates and that has to do with the sensitiveness of the soul to duty. What a blessed thing it would be if every Christian were so accustomed to work that whenever he ceased from any duty he would suddenly awake as from a bad dream! It is possible for every one to be thus sensitive to every call of duty. And if any one is not so warned, it is probable that he has become so accustomed to the warning and has so many times neglected it that he hears it no more. Even a good alarm-clock put beside the bed fails to awaken some people, simply because they have neglected to heed it.—Northwestern Christian Advocate.

Treasures

No one is a fool always; every one sometimes.

Never expect others to keep for you a secret which you could not keep yourself.

Woman lost Paradise to make man happy; he deserves Purgatory if he makes her wretched.

More reputations are hinted away by false friends than are openly destroyed by public enemies.

Trust him little who praises all; him less who censures all, and him least who is indifferent about all.

The mind has certain vegetative power which cannot be wholly idle. If it is not laid out and cultivated into a beautiful garden it will shoot up in weeds, or flowers of a wild growth.—McCall's.

A $100.00 Cash Prize

will be given for the most suitable and appropriate name for our New Prize Picture, illustrated on page 22 of this paper. Try for it. You may win it.

Thousands of Women Have Kidney Trouble and Never Suspect It

Didn't Know I Had Kidney Trouble

I had tried so many remedies without their having benefited me that I was about discouraged, but in a few days after taking your wonderful Swamp-Root I began to feel better.

I was out of health and run down generally; had

no appetite; was dizzy and suffered with headache most of the time. I did not know that my kidneys were the cause of my trouble, but somehow felt they might be, and I began taking Swamp-Root, as above stated. There is such a pleasant taste to Swamp-Root, and it goes right to the spot and drives disease out of the system. It has cured me, and I cheerfully recommend it to all sufferers.

Gratefully yours,
MRS. A. L. WALKER,
46 West Linden St., Atlanta, Ga.

WOMEN suffer untold misery because the nature of their disease is not always correctly understood; in many cases when doctoring, they are led to believe that womb trouble or female weakness of some sort is responsible for their ills, when in fact disordered kidneys are the chief cause of their distressing troubles. Perhaps you suffer almost continually with pain in the back, bearing-down feelings, headache and utter exhaustion.

Your poor health makes you nervous, irritable, and at times despondent; but thousands of just such suffering or broken-down women are being restored to health and strength every day by the use of that wonderful discovery, Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy.

Why Swamp-Root Gives Strength

Not only does Swamp-Root bring new life and activity to the kidneys, the *cause* of the trouble, but by strengthening the kidneys it acts as a general tonic and food for the entire constitution.

The mild and extraordinary effect of the world-famous kidney and bladder remedy, Swamp-Root, is soon realized. It stands the highest for its wonderful cures of the most distressing cases. A trial will convince any one—and you may have a sample bottle sent free by mail.

In taking Dr. Kilmer's Swamp-Root you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered. Don't make any mistake, but remember the name, Swamp-Root, Dr. Kilmer's Swamp-Root, and the address, Binghamton, N. Y., on every bottle.

To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy, Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail.

SPECIAL NOTICE.—No matter how many doctors you have tried, no matter how much money you may have spent on other medicines, you really owe it to yourself and to your family to at least give Swamp-Root a trial. Its strongest friends to-day are those who had almost given up hope of ever becoming well again. So successful is Swamp-Root in promptly curing even the most distressing cases, that to prove its wonderful merits you may have a sample bottle of this wonderful discovery, Swamp-Root, sent absolutely free by mail, also a book telling all about Swamp-Root, and containing many of the thousands upon thousands of testimonial letters received from men and women who owe their good health, in fact their very lives, to its wonderful curative properties. In writing to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say that you read this generous offer in the FARM AND FIRESIDE. If you are already convinced that Swamp-Root is what you need, you can purchase the regular 50-cent and $1.00 size bottles at the drug-stores everywhere.

Kalamazoo Steel Range.

At Factory Prices

Direct from our own Factory.

Why pay your dealer from $5 to $40 more for a stove or range, when you can buy direct from our factory

KALAMAZOO

Stoves and Ranges

saving all dealers' and middlemen's profits? We save you from 25% to 40% on every purchase and you run no risk for we give you ***360 Days Approval Test*** and a guarantee under a $20,000 bank bond. If a Kalamazoo does not satisfy you in every way, send it back and we return every cent you paid. **We pay freight.** Can we make a fairer offer? We are selling thousands of both steel and cast iron stoves and ranges in all parts of the country, and can refer you to pleased customers in your own neighborhood. New patterns, large square ovens and guaranteed fire backs. All blacked and polished ready to set up. Send postal for **Approval Offer** and Catalog No. 183.

Kalamazoo Cast Iron Range For Wood.

We are manufacturers, **not** "mail order" dealers.
We make everything we sell and sell to the user exclusively.
We make a complete line of stoves, ranges, heaters and **make them right**
We ship all Kalamazoos freight prepaid, blacked and polished and any one can set them up.
We guarantee satisfaction, or your money back.

Kalamazoo Stove Co., Mfrs.
Kalamazoo, Mich.

We fit all our ranges and cook stoves with our patent oven thermometer which makes baking easy.

FREE 1904

We will send one sample of this pin **FREE** to any person who cuts out this advertisement and sends it to us with their name and address in a letter. You must also inclose **a two-cent stamp** to pay the postage on the pin. Only one pin sent to each family. This is a gold-plated pin. It can be used as a ladies' stick pin or bangle pin. It can also be worn as a scarf pin, or the bangle can be taken off and used as a charm. The leaves are in green enamel and represent a four-leaf clover. This offer is made so that we can mail you **FREE** our great new illustrated Jewelry and Fancy Goods Catalogue. This pin is gold plated. Address
Lynn & Co., 48 Bond St., New York.

PERFECTION DYES

A Turkey Red!

on cotton DOUBLE THE STRENGTH of old kinds is made with new "PERFECTION" Dyes. Our seventy popular colors are unexcelled for brilliancy and fastness to light, air, soap and acids. Simple, sure, no dull, dingy or uneven effects. PERFECTION Dyes are specially made for coloring rug and carpet rags, and we send six large packages, any colors, by mail for 40 cts., 3 for 25 cts., or 1 for 10 cts.

Send us your address on postal and receive our booklet "How to Dye" also new shade cards, catalogue and information how to get four generous samples free.

Address W. CUSHING & CO., Dept. W, Foxcroft, Me.

RUPTURE CURED while you work. You pay $4 when cured. No cure, no pay. ALEX. SPEIRS, Box 260, Westbrook, Maine.

CHEAP FARM LANDS

LOCATED ON THE YAZOO & MISSISSIPPI VALLEY R. R. IN THE FAMOUS

YAZOO VALLEY

OF MISSISSIPPI—SPECIALLY ADAPTED TO THE RAISING OF

COTTON, CORN CATTLE AND HOGS

SOIL RICHEST IN THE WORLD

Write for Pamphlets and Maps

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CHICAGO, ILL.

BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

RHEUMATISM
Cured Through the Feet

The Success of Magic Foot Drafts Has Been So Great that the Makers Have Decided to Send Them

FREE—On Approval

We want every one who has rheumatism to send us his or her name. We will send by return mail a pair of Magic Foot Drafts, the wonderful external cure which has brought more comfort into the United States than any internal remedy ever made. If they give relief, send us One Dollar; if not, send nothing.

Magic Foot Drafts are worn on the soles of the feet, and cure by absorbing the poisonous acids in the blood through the large pores. They cure rheumatism in every part of the body. It must be evident to you that we couldn't afford to send the drafts on approval if they didn't cure. Write to-day to the Magic Foot Draft Co., F. O. 3 Oliver Bldg., Jackson, Mich., for a trial pair of drafts on approval. We send also a valuable **illustrated book on Rheumatism.**

High-Grade Flower Seeds.

20 Packages FOR 10c.

KINDS.		KINDS.		KINDS.	
Aster.	16	Candytuft.	10	Portulacca,	20
Pansy,	10	Morn. Glory,	6	Marigold,	18
Bat. Button,	10	Eschseholtzia.		Sw't William,	8
Sweet Peas.		Zennia,	12	Petunia,	10
Poppy,	18	Larkspur,	6	Sweet Alyssum.	
		Nasturtium,	10	Calliopsis,	8
		Balsam,	12	Pinks,	10
		Sweet Mignonette.			

All of the above sent to any address, postpaid, for 10c., silver or six two-cent stamps. As a premium, and to introduce our seeds into every household, we will also send a **collection of fine, beautiful bulbs free** *with catalogue.*

SOMERVILLE NURSERY, Somerville, Mass.

Seeds, Plants, Roses,

Bulbs, Vines, Shrubs, Fruit and Ornamental Trees

The best by 50 years test, 1000 acres, 40 in hardy roses, including 45,000 of the **famous Crimson Rambler**, 44 greenhouses of **Palms, Ferns, Ficus, Geraniums, Everblooming Roses** and other things too numerous to mention, Seeds, Plants, Roses, Etc., by mail postpaid, safe arrival and satisfaction guaranteed. Elegant 168 page catalogue free. Send for it and see what values we give for a little money, a number of collections of Seeds, Plants, Trees, Etc., offered cheap which will interest you.

THE STORRS & HARRISON CO., Box 135 PAINESVILLE, OHIO.

Agents for any

thing can work up a big side-line that takes very little time once a month; sewing-machine agents, tax-collectors, hook-agents, nursery-stock solicitors can double their business. Instructions and outfit cost you nothing. We only want a reply from you that you are a hustler, and we will do the rest. Write us at once. Circulation Dept. WOMAN'S HOME COMPANION, Springfield, O.

$3.50 A GOLD WATCH for $3.50

A perfect beauty. Highest grade 14k gold plate finish. Double hunting case, solid gold pattern. Elegant standard American seven jeweled movement, stem wind & set and absolutely guaranteed for **20 YEARS**. Cut this out and send it to us with your name, post office and express office address and we will send the watch and a beautiful chain to you by express for examination. If as represented pay express agent $3.50 and express charges and they are yours. Mention size wanted **LADY'S** or **GENT'S**. Catalogue and list of genuine testimonials free with every watch.

R. E. CHALMERS & CO., 352-356 Dearborn St., CHICAGO.

A FOOT HIGH PALM FOR ONLY 25 CENTS.

We will send postpaid a foot high **Phoenix Palm** for only 25c (*usual price 50c*) and a copy of our **Catalog of Rare Florida Flowers and Fruits**, offering Palms, Ferns, Amaryllis, pot Oranges and other choice pot fruits and rarest plants at the lowest prices. Catalog **Free** to all applicants.

JESSAMINE GARDENS, Jessamine, Florida.

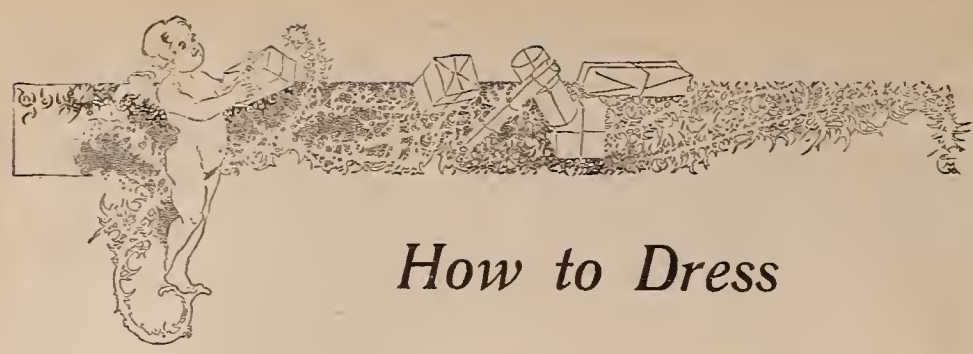
BOYS & GIRLS

Men and Women—Watches, Cameras, Air Rifles, Skates, Rings, Jewelry, Silverware, etc. **FREE** for selling 20 packets of our **PREMIUM FLOWER SEEDS** at 10c. each. No money in advance—Send name and address and we mail you 20 packets with premium list and instructions. When sold send us the $2.00 and we will forward the premium you select. Don't miss this grand opportunity. Write for outfit to-day. Address.

WESTERN SEED HOUSE, 26 Hill St., Maywood, Ill.

We want Girls

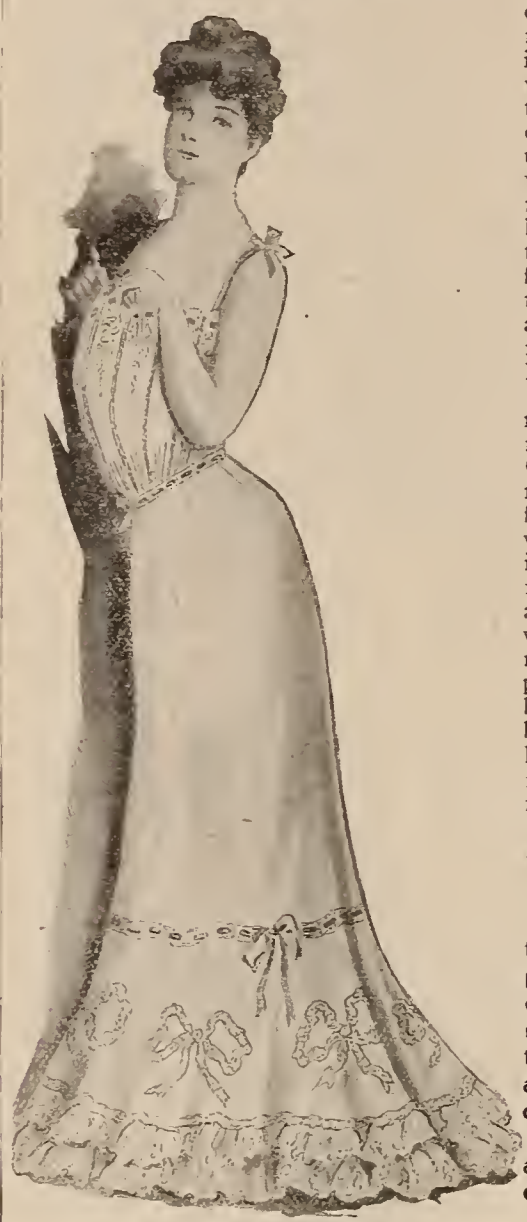
and boys in every city and town, who are bright and energetic, and who want to make some money for some particular purpose, or who would like to have a *steady income.* It is the most pleasant work possible, and will bring you in contact with the finest people. Can be done after school. Write us at once. Circulation Dept. FARM AND FIRESIDE, Springfield, Ohio.



How to Dress

Sleeveless Corset-Cover and Long Petticoat

THIS pretty corset-cover, No. 224, is a new feature in the new lingerie—the combination of trimmings. It is both hand-embroidered and lace-trimmed. It reaches just to the waist-line, where all fullness is confined in the narrowest of plaits, and is finished here with a narrow beading run with ribbon.



SLEEVELESS CORSET-COVER AND LONG PETTICOAT

This model is made without sleeves. It is held in place by ribbons, which tie on the shoulders.

The long petticoat, No. 225, fitting perfectly over the hips, is a five-gored model, made with a deep circular flounce. This petticoat is a most satisfactory design to copy. It is just the thing for an elaborate white muslin or cambric petticoat, trimmed with lace ruffles and lace insets. For a silk petticoat it is also a desirable model, and could be used equally well for one of the very new petticoats which are made with a Jersey top and a deep silk flounce. The pattern for the Sleeveless Corset-Cover, No. 224, is cut for 36, 38 and 40 bust measures. The pattern for the Petticoat, No. 225, is cut for 24, 26 and 28 waist measures.

Empire Nightgown

Every woman wants to own at least two or three nightgowns which are prettier and more elaborate than those she has for ordinary wear. This Empire nightgown is a quaint and unusually pretty model. It is made of either soft-finished cambric or French nainsook, and trimmed with fine lace and ribbons. Lace beading run with wash-ribbon outlines the low neck and also confines the fullness of the nightgown just below the bust, producing the short-waisted effect. The pattern for the Empire Nightgown, No. 226, is cut for 34, 36 and 38 bust measures.

Return of the "Princesse"

The noticeable absence of blouse in front of fancy waists and bodices heralds the return of the princesse gown. To be sure, this style is not suitable for all women, but it must be remembered that very few things are universally becoming, and the severely plain princesse robe is intended only for the woman with a beautiful figure. There is no way in which a dressmaker's art can contrive to "improve" a poor form so it will look well in a princesse. The long lines will add grace to a figure that is inclined to be overstout, but nothing can be done to render a slender form suitable for princesse dresses.—Modes.

Ladies' Chemise

The chemise, No. 223, is more fashionable this season than it has been for many a long year. However, it is the chemise cut on new and improved lines. It is so made that it adds but very little to the size of the figure. This very pretty model is laid in fine tucks in front. It is trimmed about the neck with a hand-embroidered ruffle of the material. Over this ruffle, in front, revers add to its daintiness, and are joined with a soft rosette of pretty wash baby-ribbon. The lower part of the chemise is cut sufficiently full to make it a good substitute for a short petticoat. The back is plain. The pattern, No. 223, is cut for 34, 36 and 38 bust measures.

LADIES' CHEMISE

PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention number and size of pattern desired, as this will insure prompt attention to all orders.

Our Fall and Winter Catalogue sent to any address free. This catalogue is very complete and satisfactory in every detail.

EMPIRE NIGHTGOWN

FREE

LADIES TAILOR MADE DRESS SKIRT

Just send us your name and address, so we may tell you how to get this fine skirt **absolutely free.**

YOU CAN HAVE ONE

for we are going to give away 5,000 of them. This is an honest, straightforward offer, made by a responsible firm who always do as they agree. This fine 7-gored, tailor made skirt has all seams double stitched and twelve rows of stitching at bottom. It is made of black or blue high grade melton. We send free samples for you to choose from. It is a very handsome skirt, stylish, up-to-date, carefully finished, and we make it to your measure so that a fit is sure. Any girl or lady can earn one of these fine skirts in a few minutes. It is so easy that it will surprise you. All the ladies say so.

Do Not Send Any Money

but just write that you want to earn one of these skirts and we will send full particulars by return mail. Nothing adds more to a lady's appearance than a handsome tailor made skirt. Write at once for full particulars and free samples of our goods. Address **People's Popular Monthly, 274 Man. Bldg. Des Moines, Ia.**

43 FLOWERS 30¢

Worth $1.25

A SPECIAL OFFER made to introduce our goods. Satisfaction guaranteed or money refunded.

20 Pkts. Seeds

1 Pkt Pansies, 10 colors, mixed.	1 Pkt. Diamond Flower.
" New Candytuft "Empress."	" California Sweet Peas.
" Washington Weeping Palm.	" Double Chinese Pink.
" Mary Semple Asters, 4 colors.	" Carnation Marguerite.
" Alyssum, Little Gem, mixed.	" Heliotrope, mixed.
" Bouquet Chrysanthemum.	" Poppy—American Flag.
" Forget-me-not "Victoria."	" Umbrella Plant.
" California Golden Bells.	" Giant Verbena, mixed.
" Lovely Butterfly Flower.	" Japan Morning Glory.
" Phlox Drummondii.	" Petunia Hybrid, mixed.

23 BULBS

1 New Begonia, "Splendens," 1 Summer Flowering Hyacinth, 1 Double Pearl Tuberose, 2 Butterfly and 2 Hybrid Gladiolus, 8 Fine Mixed Oxalis, 2 Fair Maids of France, 2 Hardy Wind Flowers, 2 Lovely Cinnamon Vines, 2 Splendid New Canna Lilies—1 crimson, 1 "Novelty."

A Return Check Good for 25 Cents on first $1.00 order; also our **New Floral Guide,** telling all about Roses and 400 other choice flowers. All postpaid, only 30c.

THE CONARD & JONES CO.

"Growers of the Best Roses in America."

Box 35 WEST GROVE, Pa.

MONEY IN GOOD CABBAGE

My elegant new book for seed growers is a storehouse of rare seed information. Tells about my famous varieties of **money-making cabbage.**

WRITE TO-DAY **FREE** Mention this Paper

and I will send you a package of **Buckbee's New Early Marvel Cabbage** the best-growing variety on earth, together with a copy of my great Seed Book.

H. W. BUCKBEE

Dept. L 52 Rockford Seed Farms Rockford, Illinois

Try the New Majestic Tomato

This grand variety we claim to be the largest and most productive kind in existence. It yielded 1100 bushels per acre on our place last season, grown under ordinary conditions, and will, we believe, double it by special culture. The fruit is not coarse and rough like other large sorts but is of fine shape and unsurpassed quality. The seed is scarce this year and sells at 40 cents per packet of 100 seeds. We desire, however, to place our catalogue in the hands of every one who has a garden and have decided to send a trial packet of 25 seeds **FREE** if you mention paper in which you saw this advertisement.

$100 in Cash Prizes

$35 for largest tomato grown, $40 for largest yield from one plant, $25 for best photograph of a plant. Postal brings 10c worth of seed, a chance to win a valuable cash prize and the finest seed catalogue published. Our Iowa Seeds are unsurpassed

IOWA SEED CO., Des Moines, Iowa.

Hammond's Seeds Lead

in vigor, yield, earliness and quality. Better cannot be had. Prices very low. We can save you money. Northern Grown always the BEST. Our handsome 100-page catalog of Garden, Field and Flower Seeds mailed free on request.

Harry N. Hammond Seed Co., Ltd.

BOX 77. BAY CITY, MICH.

$60 PER MONTH straight salary and expenses for men with rigs to introduce our Poultry Remedies among the farmers. We mean this, and furnish Bank references of our reliability. Don't answer unless you mean business. Address EUREKA MFG. CO., Dept. 4K, East St. Louis, Illinois.

Wonderful Medical Discovery

Remarkable Remedies That Cure All Diseases

The Famous Doctor Discoverer and Scientist James W. Kidd Now Offers to Every Afflicted Person a Free Treatment

It has only been a short time since there appeared in the columns of nearly all the prominent newspapers of the world an announcement of the remarkable discoveries made by Dr. James W. Kidd. Physicians, scientists and professional men marveled at the wonderful cures which he performed with ease. Invalids who had suffered for years without hope were, it seemed, almost miraculously restored to

DR. JAMES WILLIAM KIDD

health. The doctor was besieged by thousands of letters asking for information and assistance, until at last he determined to give his secret to the sick and afflicted of the world. Thousands have taken advantage of his liberal offer, and his mail is now flooded with letters of heartfelt gratitude from cured patients.

All Diseases Cured

Every disease to which human flesh is heir is represented in these letters, the so-called incurable diseases being as numerous as the less serious cases. A letter from Cliff Latimer, of Loveland, Ohio, gives the details of his miraculous cure of Consumption as follows: "I had Consumption, was examined by four prominent doctors, one of whom, a specialist, made an examination of the sputa, and pronounced my disease pulmonary consumption, and told me that there was no hope. I weighed one hundred and twenty pounds. Now I am well and strong. Every trace of the disease has left, and I weigh one hundred and seventy pounds. It has been over a year since I took Dr. Kidd's treatment, so I know the cure is permanent." Abraham Trauger, of Lambertville, N. J., afflicted with locomotor ataxia, a disease pronounced incurable by the medical profession, tells of his cure after years of suffering: "When I commenced treatment with Dr. Kidd for locomotor ataxia I could not walk across the floor. Since finishing treatment I have not lost a day from my work as foreman of the Lambertville Rubber Co." Thomas J. Halferty, of Brimfield, Ind., writes as follows: "Dr. Kidd cured my son of a severe case of Bright's Disease after he was passing large quantities of blood in the urine." The record of such miraculous cures would fill a book. Sufferers from consumption, Bright's disease, dropsy, paralysis, heart disease, locomotor ataxia and other dangerous diseases have been restored to health. The common chronic diseases, such as rheumatism, kidney trouble, catarrh, female troubles, bronchitis, epilepsy (fits), chronic coughs, lumbago, bladder troubles, scrofula, impure blood, skin disease, goitre, piles, bowel troubles, general debility, nervousness, lost vitality, contagious blood poison, etc., are cured in so short a time that it seems almost a miracle.

A Home Treatment

An important feature which recommends this wonderful treatment, rightly called "The Elixir of Life," is the fact that it can be used at home by any one. The remedies are simple in composition, harmless to the most delicate system, but a secret known to no other living doctor.

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Three National Banks in Fort Wayne vouch for Dr. Kidd's reliability. Ministers, City and County Officials, Professional and Business Men all unite in giving him the heartiest endorsement. Fort Wayne is proud of her distinguished doctor. One and all say that his success is deserved by his ability, honesty and industry. To the doctor the good-will of his fellow-townsmen and the expressions of gratitude from the thousands to whom he has given the blessings of vigorous manhood and womanhood are sufficient to pay for the years spent in patient study and experiment. To make known to every suffering person in the world the fact that there has at last been discovered a treatment which will positively cure all diseases he has made the following remarkable offer:

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To secure personal attention address the doctor's private office as follows:

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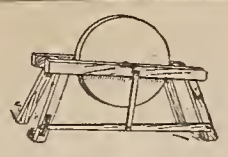
122 Baltes Block, Fort Wayne, Ind.



Prize Puzzles

We Want to be Neighborly, and so Invite All of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.

SIX POPULAR QUOTATIONS

Here are Six Familiar Quotations, in Each of Which Several Blanks Have Been Left for You to Fill. To the First Man, Woman, Boy and Girl Who Send in Correct Lists of These Quotations, with the Authors' Names Attached, the Usual Cash Prizes Will Be Awarded. Consolation Prizes Will Also Be Given.

1—"Our hearts, our ———, are all with thee,
Our ———, our hopes, our ———, our tears,
Our ——— triumphant o'er our fears,
Are all with ———, are all with thee!"

2—"Scatter ——— o'er a smiling land."

3—"Across the narrow ——— we flit,
One little sand ——— and I;
And fast I ———, bit by bit,
The scattered ——— wood, bleached and dry."

4—"And her ——— locks hang on her ——— like a golden ———."

5—"Breathes there a ——— with soul so ———,
Who never to ——— hath said,
'This is my own, my native ———!'"

6—"'Tis the last ——— of summer
Left ——— alone."

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a three-sheet floral art calendar will be given for the first correct list of answers received from each state and territory. This means a calendar for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever they may be located. In the states where the cash prizes are awarded the prize calendar will be given to the person sending the second correct list, so that no one person will receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

ANSWERS TO PUZZLES IN THE JANUARY 1st ISSUE

The Flower Puzzle

As none of our readers were able to solve the Flower Conundrums, no prizes are awarded this issue. The correct list is as follows:

1—Phlox.
2—Daisy (Day's Eye).
3—Forget-me-not.
4—Bleeding-heart.
5—Aster.
6—Poppy.

The Valiant Lover

BY CLINTON SCOLLARD

Shall I brood, and shall I grieve,
Wear my heart upon my sleeve,
At the ironies of Love
Storm, and mourn the sweets thereof,
Since the bitter fates decree
Heart's-ease bourgeons not for me?

Nay; although we may not press,
She and I, in long caress,
Lip to lip, nor hand in hand
Rove the summer-lilied land,
Still shall faith uplift my soul
High above the depths of dole!

Faith in her white constancy,
Though leagues part us like the sea;
Faith in ways that now diverge
In Love's time shall meet and merge;
Faith that life shall one day seem
Like a paradisial dream!

Valentine

BY CLINTON SCOLLARD

In richly builded bowers
To me no flowers
Belong;
I've but this modest bloom
With its perfume
Of song!

Just a rhyme-blossom wrought
Of fragrant thought
And love;
But oh, the deep heart-stress
And tenderness
Thereof!

It is my all I send
To you, my friend,
My best;
In bliss were I, would you
But fold it to
Your breast!

It is to Laugh

MIRANDA INDIGNANT

Miranda Double appeared at the counter of a certain publishing-house to leave her subscription, and was quite disturbed when the clerk asked her if she was a single lady.

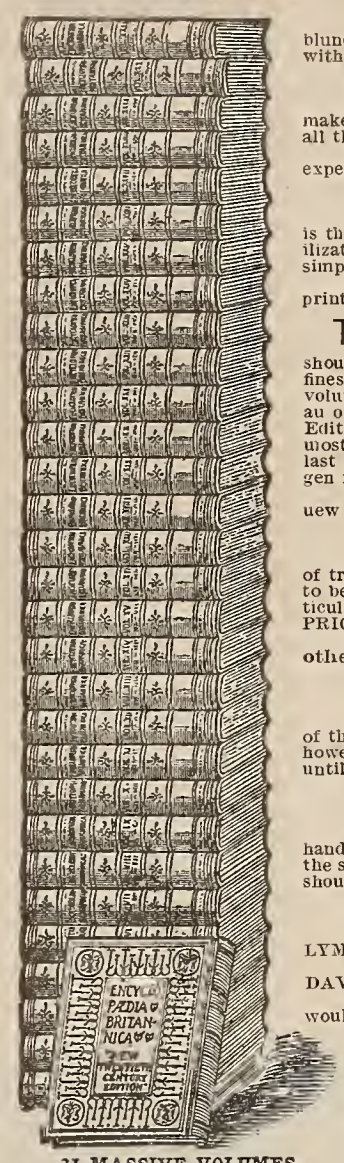
SUDDEN CHANGE

After a beautiful young girl had left the counter of a country store with her purchase of calico, the enchanted clerk made the remark, "We did call that calico, but now it is 'queen's ware.'"

BIRDS OF A FEATHER

A young lady who is exceedingly fond of reading, wishing to obtain one of the late books, known as "The Speckled Bird," sent a note with her little sister to the library asking for "The Speckled Hen." E. C.

START 1904 RIGHT!



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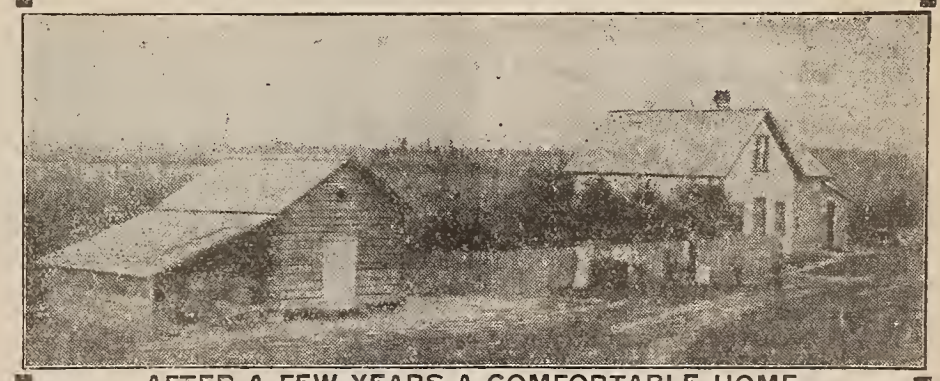

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Comrades of Travel

By FRANK H. SWEET

CHAPTER XV.

HARRY THORNTON

THERE was an awkward pause, then Harry advanced slowly—reluctantly, Page thought—and held out his hand. "Glad to see you, Page," he said, without much warmth. "I got here day before yesterday, but have been very busy. I intended to look you up soon."

"Intended—to look me up soon!" Page repeated, in amazement. "Why, Thornton, didn't you get my letter and telegram? Don't you know the land is all ready for you to commence business again? I have fifty men at work there now, and left word with the foreman that you would be down in a few days to take charge."

"Very nice of you, I'm sure, Page," Thornton answered, with an uneasy side glance toward his companion. "I appreciate it, of course. B -er—I think we'd better let the plan fall through. ceived your letter and the telegram, and—er—I was t to answer, when another telegram came, and I—I started—"

"The fact is, Mr. Withrow," the capitalist broke in, suavely, "my young relative here will not have occasion—ah-h—to join you in any more coöperative business measures. You see, I had a loss in my family recently, and—ah-h—made a little investigation. Harry here, I find, is my nearest relative—so far removed, however, that we never knew of each other's existence before."

The capitalist wheezed, and puffed his cheeks leisurely, his eyelids parting occasionally for observation.

"There's no cause for telling you this, of course, Mr. Withrow," he went on; "but I don't like loose ends in my business affairs, and you and Harry have had some—ah-h—very peculiar connections—irregular ones, if I may use the term in a per-cent sense. It is about this I wish to speak. Harry has been very frank, and explained it all. You see, if he proves satisfactory, and capable of controlling millions, I shall make him my heir. So far he has pleased me very well. He seems unusually complaisant and ready to meet my wishes. Now, if he has or can develop a shrewdness to bring others to his wishes, it will be all right. You see that I am very frank, Mr. Withrow; but I wish you to understand. A young fellow in Harry's position, just from comparative insignificance to prospective millions, is apt to be rather popular —ah-h—with former acquaintances, especially with those who may feel that they can establish some sort of claim—ah-h. You understand?"

Page nodded. He had been watching Harry, the pitying comprehension in his eyes accompanied by a certain pain, and perhaps disappointment. He had known Harry a good many years, and they had been more or less intimate ever since the day Harry had saved him from drowning. He had watched over and tried to strengthen the weak points of the vacillating character. This was another phase, though entirely in keeping with the rest.

"Yes, you understand," the capitalist repeated, his eyes searching through the lines of the partially unclosed lids. "It's better you should. There's been—ah-h—quite a considerable loss of money in connection with your coöperative affairs, I believe, and it was all furnished by you. Now—ah-h," his voice becoming more affable, "in case of any peculiar stress or urgent need, you might feel—er—that some reimbursement. Quixotic sentiment—ah-h. You follow me?"

"Yes, I think I do," Page answered, drily. "Harry need not apprehend any financial presumption on my part. He knows me well enough for that, or should."

Harry flushed a little, but did not raise his gaze from the ground, where it had remained through most of the conversation. "Of course, Page," he said, hastily, "I never thought—"

"Harry informed me that there were no notes passed—ah-h," the capitalist went on, ignoring the half-uttered apology, "no witnesses, promises made, or legal obligations of any kind whatever. In short, Mr. Withrow," briskly, "no matter in what stress of circumstances you may find yourself, or what degree of prosperity may at any time surround Harry, you two, if I may use the term in this connection, are quitclaim of each other."

"Assuredly," replied Page. The disappointment was going from his eyes, leaving them satirical and hard. There was a limit to his forbearance, and Harry was going beyond it. "You and Harry need not fear any claim on my part," he continued, grimly. "We are quit, as you say. And I will add for your peace of mind what I have never even told Harry before, that the money I put into the enterprise was virtually a gift to him. I never expected to realize profit from it, or to get the principal back. Harry had done a great service for me once, and I allowed the memory of that to take precedence of my better judgment. I went into the business because I hoped my connection with it might stimulate him to better work than he had previously done, or that he would be apt to do by himself. I was mistaken. I had to be away much of the time, and left the full control with him. The result was perhaps natural. However, Harry showed so much chagrin at his lack of judgment that I concluded to try again, and I decided on this pineapple-growing as the business best suited to his peculiar temperament. I am very glad that he has found better prospects, and is able to let this plan 'fall through,' as he expresses it. If you like, I am willing to give you a 'quitclaim' in full —his time against anything that I may have lost."

He was looking at them smilingly now. Harry flushed, and his gaze rose resentfully from the ground, but it did not meet the steady eyes that were scorning him.

"I'm glad you put it that way, Page Withrow," he cried, hotly. "It frees me from any feeling of obligation that I may have had."

"I don't think any such feeling has ever bothered you much, Harry," was the quiet answer. "The last few minutes have carried me back to a good many things of the past ten years that I tried to blind myself against at the time."

"Well, I believe that is all," Mr. Burley said, rubbing his hands complacently. "We know just where we stand now. It saves complications—ah-h. You think it's a rather odd sort of talk, I suppose, Mr. Withrow, and a rather odd time and place to have it, but it doesn't matter in the least. It will save you hanging about the hotel in search of unnecessary explanations from Harry. And, excuse me, Mr. Withrow, but—ah-h—you can understand that our time will be very much occupied. Come, Harry."

They turned down the walk to the pier. Page continued on toward the avenue. Mrs. Payne had walked ahead a few rods, and seated herself upon one of the settees, where she was now awaiting him. As he went toward her there was a curious mingling of comprehension and perplexity in Page's mind. It was evident that Mr. Burley's intention had been to anger him so that he would stay away from them. But why? The idea of their time being occupied was absurd, as was the plea of his "hanging about the hotel" in quest of an explanation from Harry. Indeed, most of the capitalist's talk had been a scarcely concealed pretext to irritate him. And yet only a few days before Mr. Burley had seemed anxious to please him, and to establish friendly relations between him and Mr. Loud. Of course, it was to bait him into the promoter's scheme. But was not the scheme still in existence, and his money just as desirable as it had ever been? It was difficult to understand. But, after all, what did it matter? In pleasing them he would best please himself.

Suddenly Page raised his cap

Some light on the subject, however, came with his mail that night. More came while he was on the lake the next day. Among his letters was one from his business manager, brief and to the point. It read:

"MR. PAGE WITHROW.

"DEAR SIR:—Notification has just reached the office of an assessment of one hundred per cent on your holdings in the Central. It is imperative, and calls for action inside of thirty days. Of course, it is a scheme of the few controlling stockholders to freeze you out, but no crookedness appears on the surface. What shall we do? The amount involved is too large for you to lose."

During the reading Page's eyes had flashed, then hardened—a sign that he was angry, and not to be intimidated. He answered at once:

"Fight them; there is nothing else to do. I know the men. The demand is fraudulent, however much legal phraseology and plausibility they may work into it. Engage the best lawyers procurable, and give them such retaining fees that they will be glad to drop all other business and devote their whole energy to the case. There is crookedness somewhere, and they must find it, and then take hold and throttle it. We will not yield one cent to their demand, but if necessary use a million, two millions, to save the stock and thwart them."

Page paused for a moment, his pen held undecidedly above the paper. Somehow he did not like this method of fighting—it was too much on the defensive. Suddenly a smile came to his face, and the hardness in his eyes gave way to amusement. He wrote on, rapidly:

"On second thought, a better plan will be to head them off in their own way. There are still a good many small stockholders in the Central. Buy up all the shares you can, even though the price may seem to be exorbitant. We want to make ourselves just as strong as possible. My idea was to return our original stock to the man I purchased it from as soon as it should be safe from Burley's ring. Now I see a much better plan. Buy and transfer stock to him to his original amount. He will be a good man to have with us. Buy stock for yourself. And if you know a few strong, safe men, bring them in, too. I believe the investment can be made a profitable one for all of us.

"As soon as we are strong enough, call a special meeting. There must be a thorough change in officers. Either I will run up, or will cast my vote by proxy. Be on the lookout for a few practical men who thoroughly understand the railroad business, and when you find one, secure him at a generous salary. Most of the present officers are inefficient tools of the Burley clique. We want the best railroad men that we can possibly get for manager and superintendent, and to fill the other important offices. I have a great deal of faith in the possibilities of the Central. It runs through a prosperous country, and one that is growing. The trouble is that the road has thus far been in the hands of unprincipled speculators, who have thought more of their own pockets than of the interests of the general stockholders. And the road itself is in almost as deplorable condition as its management. My idea is to get control, and then call, not for one hundred, but perhaps two hundred, and even three hundred, per cent on the original investment. Those who do not care to enter the new deal can throw their stock upon the market, and I will buy it at par. Thus there will be no loss, not even to Mr. Burley and his associates, though I would like to give them a few days' fright at the prospect of being frozen out instead of freezing.

"With the additional capital thus obtained we will buy new rolling-stock, build branches, and put the road into thorough working order. For the first few years there will probably be more outlay than income, but after that I think we will find the Central a well-paying investment. There will be no difficulty about the new deal, provided you can break the Burley combination, which I think you can. You may negotiate four, and perhaps even five, millions for us, and I have friends whom I think will be glad to take half as much more on my recommendation. That, with what we have, will give us the control we need.

"I think this will be sufficiently explicit for your guidance. In case you are in doubt about anything, please advise me at once."

In his mail Page also found a circular. It was a preliminary announcement of Mr. Loud's new promotion. He glanced at the heading, and then dropped it contemptuously into his waste-basket. Had he read a little further, he would have found Mr. Burley's name as president, and below it his own as vice-president.

The next morning the "Madeline" came around as usual; but though they waited an hour, Dorothy did not put in an appearance. Mrs. Payne proposed that they wait longer, but Page said that it would be of no use—if Miss Dorothy had been able to go, she would have been with them by that time. For some cause she had been detained. But as they went up the lake they saw another boat tacking directly across their bow. As she passed, the occupants of the two yachts were within easy hail. Suddenly Page raised his cap. A girl on the other boat was fluttering her handkerchief. It was Dorothy. Harry Thornton was beside her. On the opposite seat were Mrs. Spencer-Browne and the capitalist. Mrs. Payne recognized the girl at the same time, and her face clouded. Page laughed.

"Don't blame her, Mrs. Payne," he said, cheerfully. "You haven't seen as much of Miss Dorothy as I have. She will explain it all right. The responsibility for this rests with her aunt, Mrs. Spencer-Browne—"

He stopped abruptly, for Mrs. Payne's hand was trembling on his arm.

"Mrs. Spencer-Browne!" she repeated, a strange light coming into her eyes. "Is she Dorothy's aunt?"

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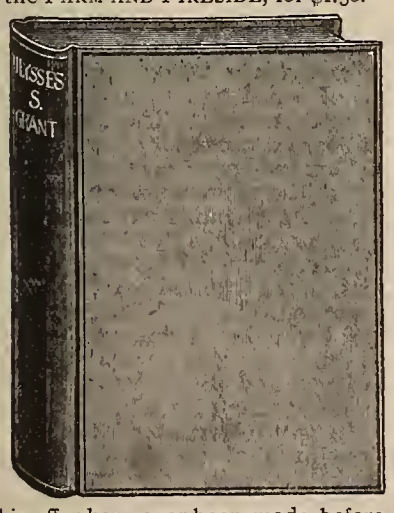

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BOOK DEPARTMENT

FARM AND FIRESIDE, Springfield, Ohio

CHAPTER XVI.

A FLIGHT AND OTHER THINGS

The next morning Page called at the Inn, but unfortunately Mrs. Spencer-Browne happened to enter the office just as the room-clerk gave his card to a boy. She came directly to him.

"You called to see Dorothy, I suppose," she said, coldly. "Well, it is very unfortunate, but she and Mr. Thornton have just started for a long walk. She is showing him about the place. He is a very interesting young man, though of course I needn't tell you that, as you used to see something of him in his—er—obscure days. No," as though anticipating a question, "it will scarcely be worth your while to call again this afternoon or evening. After lunch we are all going out on the lake, and in the evening I shall arrange a whist or euchre party. It is very unfortunate, but you will understand."

When he returned, Mrs. Payne met him half way down the path, her eyes bright and inquiring. "Did you see her?" she asked.

"No," answered Page, ruefully; "she is out. And she will be engaged this afternoon and evening."

Mrs. Payne's eyes filled with tears of disappointment. "What does it mean, just chance?"

"No," smilingly; "just Mrs. Spencer-Browne. She is very resourceful in such matters."

"But you will try to see her again very soon?" wistfully.

"Certainly. I will be at the Inn before she can possibly go out to-morrow morning, and will find some means for an interview." He looked down at her with pleased eyes. "Miss Dorothy will be glad to know of the interest you take in her," he added. "She liked you."

"Interest!" Mrs. Payne's voice broke with the sudden yearning tenderness that came into it. "Oh, Mr. Withrow, don't you understand? Haven't you suspected? Mrs. Spencer-Browne is my own sister. Another sister, Dorothy, was married after I—left home. She was my favorite, and next to me in age. I heard there was a child, and later that Dorothy was dead. That is the only news I have heard of my family in years. When I first saw little Dorothy, I was startled; but I would not allow myself to believe the truth, it seemed so impossible. But when you mentioned my sister's name yesterday, I knew."

Page grasped her hands impulsively, his face beaming. "Why, this is glorious!" he cried. "Dorothy's aunt! No wonder she liked you, even though it was unconsciously. I will go back, and wait until she returns, and tell her."

Mrs. Payne smiled and shook her head. "I think I would wait until to-morrow," she advised. "Perhaps Mrs. Spencer-Browne knows of my presence here, and is on her guard. And—and if it could be arranged I would prefer to meet Dorothy by myself and acquaint her with the relationship. She may not even know that she has another aunt."

"I think it can be arranged all right," Page assured her, confidently. "I will see Miss Dorothy, and persuade her into a short walk; then I will bring her around this way, and you and she can finish the walk together. And now," cheerfully, "suppose you and I take a walk ourselves. We will not go out in the 'Madeline' to-day. Is there any place you would like to visit?"

"No, not particularly, unless we should go into Miss Woodward's studio for half an hour. I was introduced to her the other day, and found her very pleasant. She invited me to call in and see her whenever I liked. You can look at the oil-paintings and water-colors while we talk."

"Perhaps I shall want to talk, too," Page responded, gaily. "But never mind; I am very fond of good pictures. Miss Woodward's it shall be, and then we will take a short walk along the lake. This afternoon I will have a wheel-chair brought around, and we will go to the rubber-tree. You have not been there yet. Then to-morrow for Miss Dorothy."

But when he called at the Inn next morning the clerk told him that Mrs. Spencer-Browne and her niece and the two gentlemen had taken the train south the night before. Very likely they were going to Nassau; or it might be to Key West or Havana, he did not know.

A week later the Royal Poinciana opened, and after that there was a marked increase in the gaiety of the place. Concerts in the cocoanut grove became a daily afternoon feature when the weather was pleasant, and frequently the colored waiters of the hotels got up a cake-walk, at which the guests were amused spectators. Balls were given in the Poinciana, and garden-parties in the grove; the golf-links, the swimming-pool, the beach and the trails all received their generous increase from the new arrivals, and there were few days now when any of the lake-boats lacked engagements.

Page and Mrs. Payne did not go out on the water every day now, but diversified their time with hours in the grove, listening to the orchestra, and with hours at the swimming-pool, watching the bathers, and on the pier, watching the fishermen, and with perhaps even more enjoyable hours roaming about the many trails. And with every day—every hour, it seemed—in the open air, Mrs. Payne grew stronger. New color came to her cheeks, new brightness to her eyes; and then one morning something else came, which sent her hurrying down the slope to Page, who was standing on the pier.

"Oh, Mr. Withrow!" she called, her eyes shining, "it has come at last, after all these long years of waiting. I am so glad for Will's sake! I want you to read this, the paragraph here;" and half laughing, half crying, she thrust an open letter into his hand, pointing to the particular passage she wished him to read. It ran:

"The invention was finished last week, and is all right. I have shown it to but three manufacturers, and two of them have made me offers—one a hundred thousand for a full title, the other seventy-five thousand for a half interest. Of course, I took the latter, for I have faith in the increasing value of the invention as it becomes advertised. Had I the money, I would have put it on the market myself. However, a half interest will yield us a good income; and that, with the seventy-five thousand, will enable us to do most of the things we have talked about. It is not much, but I have other things in view. I shall remain here a week, to get things under way, and then join you in Florida for the rest of the winter. So look out for me, Alice, just seven days from the time you receive this letter."

"Why, this is indeed fine!" cried Page, heartily. "Good things seem coming to you with a vengeance, Mrs. Payne. First it is Dorothy, now this. I wonder what will be the next. Well, we must get you into just as good condition as possible to astonish that husband of yours. No loitering in the house now. You may rest just as much as you like, but it must be in a hammock or a piazza-chair or on the cushions of the 'Madeline.' Nothing that savors of indoors enters into my prescription, Mrs. Payne. Now get your hat, and we will walk up to the Cragin place."

She obeyed, laughing.

Nothing had been heard of the whereabouts of Dorothy and her aunt, and when, passing through the woods that afternoon, Page called at the little hut which he had been invited to share, he found that Bill Wittles, too, had disappeared.

But the very next day brought a characteristic letter from Wittles. It read:

"DEAR PAGE:—Soon as you get this, come down. Don't stop to hem and haw, but cut sticks. This is the last summons and day of grace, and there ain't no monkeys in it. I've thought that over from up garret to down in the cellar, and about give the idea up. There's millions in monkeys, but I'm afraid my head ain't quite big enough to carry the job through. And anyway I've got a better plan now—a more steady one. Monkeying has a hobo Italian taste that I don't quite like when I think it over. I'm going to build up a little savoor myself, far as I know how. My idea now is to start a pine-apple plantation soon as I get the dough. Now, if you, with your savoor—but say, I ain't blaming nobody, this letter's about you coming down. Take the first train. Dorothy says so.

"P. S.—No, she didn't quite say that, but she said for me to put in her letter, which I do.

"Page, I'm fired. It was this way: Up to Palm Beach Dorothy let me have a note to give you. She didn't see the Duchess, who was on tother side the room talking to that fat man with shut eyes. Well, soon as Dorothy left, the Duchess sailed across to me, and said she'd some letters to mail, and would take that into the office with the rest. I leave it to you, Page, what could I do? She was my boss. And of course I didn't know then that there was any hitch. Well, now, what do you suppose? Yesterday the Duchess wanted me to unpack some of her wraps, and what should fall out but that note. I knew it soon as I clapped my eyes on it. And I ketched on quick. Say, but I was mad! I just stepped back, and give it to her up and down, and Dorothy stood there grinning—no, I won't say that, but looking sort of funny. Of course, I was fired. Not in words, though. The Duchess was too mad for that. She just pointed to the door, and glared.

"Say, Page, I didn't know there could be so much in eyes. Dorothy didn't say a word nor make a sign, and she only give just one careless look toward me; but there was something in that look that told me I was to hang around, and I did. Well, in about an hour she come outdoors to where I was, and said

[CONTINUED ON PAGE 23]

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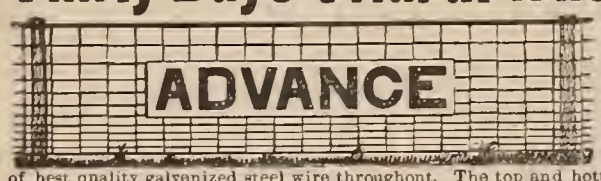

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CAPRICES OF ST. VALENTINE

A Valentine Party

About the tenth of February all of Alice Brown's friends received invitations to her party. There was a great deal of fun over them, for they were certainly unique. At first sight nothing was seen except a small square of white paper with a red heart standing out a little from the surface, but investigation brought to light a funny figure, or face, as shown in illustration No. 1. To make these requires some

No. 1

heavy writing-paper and a sheet of red paper. Cut out by the outline shown, then fold as follows: Back the ears, which have been covered with red paper; then fold down the flaps above and below the features, to hide the drawing, and lastly fold over the sides, so that the two red ears meet and form the heart. The invitation was written on the forehead and chin of this queer face. When folded it should be about three inches square.

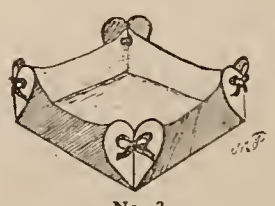
Several features of her party were not new, so we will not waste time in describing them, but speak of one that was new to her young friends. This was a test writing of poems. Alice had come across a very pretty valentine with a blank space left for an original valentine verse, so she had written one to fill the place. Next she had prepared as many slips of paper as there were guests, and on the right end of each had written the rhymes that ended her verses. Each guest was told to try his or her luck at seeing who could come nearest to the original. The one who guessed the nearest was given the original as a prize, and the one who was the widest of the mark was presented with a funny valentine (not a so-called comic).

I give the original, and following it the nearest guess (although none were very much like it), in order that a better idea may be gained of the process:

"I am a poet in my heart,
And thou art one in thine;
But lest you think I think I'm smart,
I'll buy your valentine."

"If I were a poet, I'd write of a heart,
And the heart, dearest love, should be thine;
And I'd never do aught that should make it to smart,
For I love thee, my own valentine."

One very pretty feature of the luncheon-table was the dainty valentine style of baskets, which were filled with French bonbons. Both the candy and baskets were made by Alice. Illustration No. 2 shows the outline of the design by which the baskets were made. For each basket two such shaped pieces of light-weight cardboard—one being white, the other red—were used. These two pieces were put together and made up as one—giving the effect of white hearts on red baskets for the boys, and vice versa for the girls.



No. 3

Cut out the pattern as shown, punching the holes after the heart halves are bent back; this allows each two holes to be cut out at once. After folding the heart pieces back, fold the sides up into a box-shape, and tie with bits of baby-ribbon into the shape shown by illustration No. 3.

If made with the bottom three inches square, and the other parts in proportion, the little basket will hold about half a pound of candies. These were made mostly in the shape of hearts, and a few motto hearts from "store candies" were mingled among them.

Cakes and sandwiches were cut in heart-shapes, and the table was prettily decorated with cheap but dainty valentines and long crêpe-tissue "ribbons."

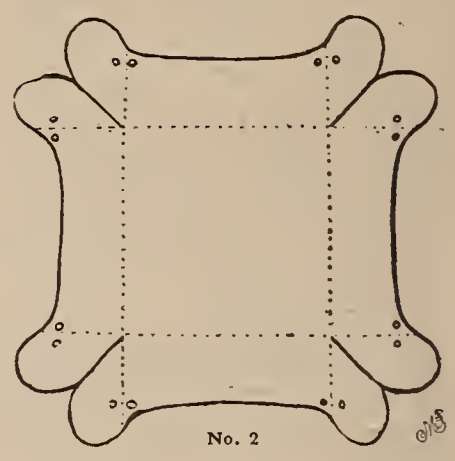
After supper the usual games were played, and the guests had a great deal of fun out of "drop the handkerchief" played with a big red pincushion heart instead of a handkerchief. Checkers were played with red and white candy hearts, and a heart hunt was conducted somewhat after the lines of a peanut hunt, only in this case tiny gummed-paper hearts were stuck in various places all over the rooms. The person discovering most of these, and marking them with his number if they were not easily removed, received as a prize a "string of hearts." The "booby" hunter had the red pincushion heart as a consolation.

MAY MYRTLE FRENCH.

Hearts Hold Sway

We received invitations in the form of a heart—white with red-tinted edges—showing on one side our hostess' name, residence, and the date, February 14th. The other side bore the words "Please come representing a character in romance." This was all, but those who were fortunate enough to receive these little hearts voted the evening one of the most pleasant of the winter.

As we entered the parlor we were presented cards decorated with tiny red hearts, on which were written the names of the guests. Soon the entire company had assembled, and we felt as though friends whom we knew only through books had stepped from the pages to greet us. We talked with John Alden and Priscilla, with Evangeline and Gabriel, saw Babbie in her gipsy loveliness, with the minister always near. There were also "Glory" Quayle and John Storm, with many others who puzzled us with their identity. Ample time was given for the guessing, and then, as our hostess read the names of the guests,



No. 2

each responded with his assumed character. The two most successful ones received a heart-shaped bonbon-dish, and a silver key-ring also heart-shaped.

Next came a heart hunt. Two or three hundred tiny hearts had been cut from red cardboard and numbered in groups from one to twenty. These had been hidden in every available corner and crevice about the room, while large candy hearts were found in the folds of the portières, curtains, etc. Some were broken and the parts hidden in different places, and one of these mended hearts counted the finder one hundred. Simple prizes, in the form of large candy hearts tied with ribbon, were given.

The jolliest part of the evening came when our hostess brought in bow and arrow and candy hearts, on the back of each of which was written the name of one of the women. These were fastened to a board arranged for the purpose, and with bow and arrow each man sued for the heart of the woman to whom he should present the valentine our ingenious hostess had prepared. These valentines were all made from water-color paper, cut into hearts, tinted with red paint and tied with narrow red ribbon. Some were just one large heart laced with ribbon, others two, three or four smaller ones strung on ribbon, and still others in book-form. On all of these were printed in red paint rhymes which were suitable. They were in the form of questions and answers, and were drawn from separate boxes. As each man addressed his valentine to the woman whose heart his arrow had pierced, she in turn presented the valentine she held as her reply.

One man drew a valentine on which was written the following plea:

"Now the stormy winds do blow,
And winter roads pile high with snow;
My heart is frozen without thee,
I pray you, pity, pity me!

"For Cupid is a plumber bright;
He thaws you out and sets you right,
And saves you many other ills,
But oh! he sends such awful bills.

"So send this wretched thief away—
His bills I can't afford to pay.
My frozen heart, I must confess,
Will only melt when you say 'Yes.'"

[CONCLUDED ON PAGE 21]

Hearts Hold Sway

[CONTINUED FROM PAGE 20]

From the woman came this reply:

"I would that I might answer 'Yes'
To the sweet verse you now address.
But oh, alas! not so.
Another holds my heart, so now
You must to Fate's hard fortune bow.
It is most sad, I know.
But now a secret I will tell—
To often tell them is not well,
But I will tell this one—
Another maiden here to-night
Would listen to you with delight,
And wouldn't it be fun?"

Another felt repentant for past misdeeds, as expressed in the valentine which he drew:

"A wayward boy at school was I,
My teacher now confesses.
I only loved to tease the girls,
And tear their pretty dresses.

"But now, alas! revenge so sweet—
To which so prone the sex is—
I am the victim of the fun,
'Tis now the maiden vexes.

"Oh, do forgive my early deeds
Of cruelty to dresses,
And be the valentine of him
Who humbly now confesses."

But this, too, failed to find a favorable response, as the woman to whom it was addressed read the following:

"I am sorry that you asked me,
For I really cannot see
Why a girl is always wishing
Some one's valentine to be.

"I'm determined to be single,
With no one to bother me,
With a flower-pot in the window,
And my cats and cup of tea."

Much was the merriment caused by these delightful little souvenirs, which were gaily discussed while refreshments were served.—Mary H. Rose.

Tim's New Voices

"There's all kinds of music in the country," said Tim.

"Yes," replied mama; "voices we do not hear in the city."

They were spending a few weeks in early autumn at a farm-house, and it was the little boy's first visit to the country. All through the afternoon he had heard the quail calling "Bob White! Bob White!" and mama had told him some interesting things about them—how the mother-bird, when any one goes near her nest, slips silently away, then rises with a loud whir of the wings at a distance from the nest, in order to deceive would-be meddlers as to its whereabouts.

This interested Tim so much that whenever he heard a new voice he asked mama all about it, and she quite willingly answered his questions.

When the crickets began their evening concert, she told him that they were not really singing, since the sounds they made did not issue from the mouth, but were made by their little wing-cases being rubbed together.

The crickets have a cousin that is also musical, but he makes his home in the trees instead of on the ground. One of these chirped, "Katy did," and while Tim was asking mama to tell him about it, another answered, quickly and sharply, "Katy didn't!"

"Oh!" he exclaimed, "are they going to quarrel?"

But mama laughed, and told him that was only the katydid's part in the evening's program, and that he must play it over and over again, since he knew no other number. Like the cricket, he is not a singer, but makes music by rubbing one leg against another, much as though he were playing a fiddle. Then there was the bleat of the sheep in the meadow, the grunt of the pigs in the lot, the low of the cows in the pasture, the cackle of the fowls in the barn-yard, and everywhere the songs of birds.

All these the little boy noticed the first day. The next morning he awoke before daylight, and lay quite still, thinking of them all, while mama slept on soundly. Presently he heard a sound different from any of these, and sat up in bed to listen. It was a new voice, he thought, and such a queer one! He must be told about it while it could be heard, and reaching over, he shook mama gently, saying, "Wake up, mama! Wake up! What's that singing?"

Mama lay still for a few moments, listening intently. "That?" she asked presently, as a peculiar sound was borne to her ears.

"Yes," the child answered, his eyes shining expectantly.

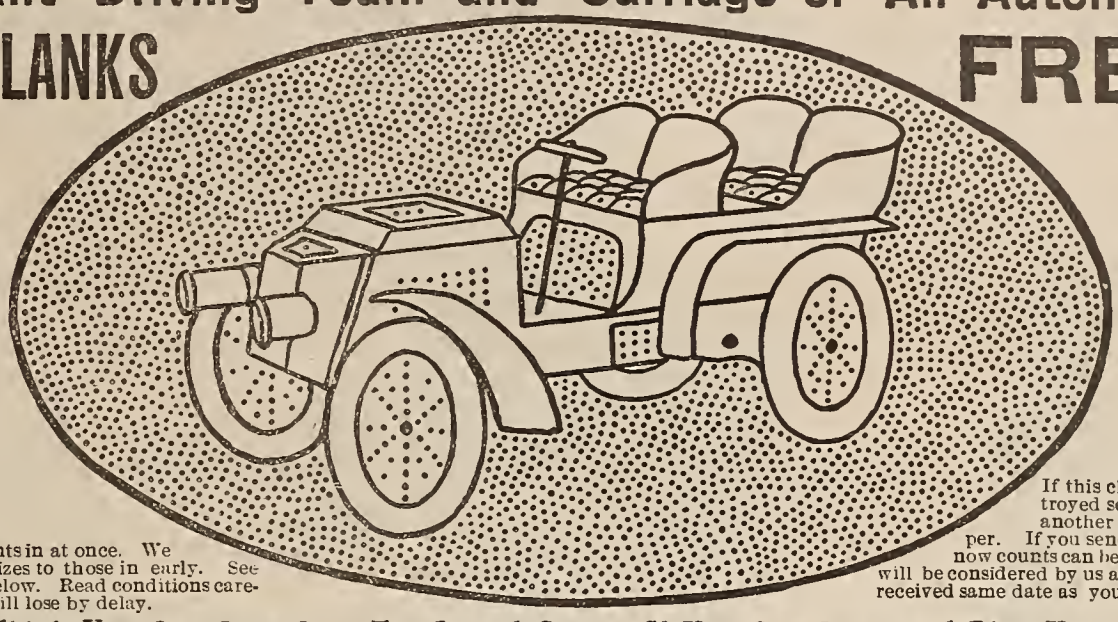
"Why, that," she said, laughing, "is Farmer Brown snoring. Did you never hear a man snore, dear?"

MARGARET A. RICHARD.

FREE An 80-Acre Farm and TWO $400 PIANOS FREE

Elegant Driving Team and Carriage or An Automobile

NO BLANKS FREE!



$50 EXTRA for first count within three of correct number!

80 ACRE FARM FREE in any one of a dozen states

Get your counts in at once. We offer extra prizes to those in early. See Time Prize below. Read conditions carefully. You will lose by delay.

If this chart gets destroyed send stamp for another on heavy paper. If you send subscription now counts can be sent later and will be considered by us as having been received same date as your first letter.

Do You Think You Can Count? Try It and See. If You Can Count and Plan You Can Win!

Have You Got a Good Plan? It May Enable You to Win a Big Prize!

THE AMERICAN HOME MONTHLY, an elegantly illustrated up-to-date home and family magazine will give FREE to those who can count the dots above correctly or nearest correctly, the following grand prizes:

FIRST PRIZE—A Gasoline, Steam or Electric AUTOMOBILE, or a Matched Driving Team, Harness and Carriage, or a Matched Work Team and Wagon, or An 80-Acre Farm.

SECOND PRIZE—Two Elegant $400 Pianos, one to a Lady and one to a Gentleman.

THIRD PRIZE—$100 Cash. FOURTH PRIZE—$50.00. NEXT FIVE—$10.00 each, and $200 to be divided equally between all who come within three of the correct count.

AWARDS WILL BE MADE AS FOLLOWS—The person giving correct or nearest correct count will get first prize. Next nearest correct, second prize, etc. In case of a tie for any prize it will be awarded to the person giving best plan for counting the dots.

EXTRA PRIZES—To winner of first prize and winners of the two pianos will be given an extra cash prize of $50.00 each if they have three or more counts entered, that is, have paid $1.00 for two years and three counts, instead of 50c for one year. Don't lose $50.00 by having only one count, and besides you are more likely to get correct count by taking three and having one on each side of what you think correct.

CONDITIONS—50 cents pays for one full year's subscription to AMERICAN HOME MONTHLY, and entitles you to one free count; $1.00 pays for two years and entitles you to three counts and makes you eligible for the special $50.00 prizes.

$50.00 FOR FIRST COUNT—We feel early counters should be rewarded and will give $50 to first person sending a count within three of correct number. The $50 goes to first person in, so do not delay; get your count in at once. If you can count within three you are sure of a prize, as part of the $200 to be divided. If you are first, you get $50 extra and are as likely as any to win automobile team, farm or piano.

OPTIONS—The Gasoline Automobile may be had to seat either two or four people. Instead of the Automobile we will give you, if you prefer, an elegant matched driving team with gold mounted harness and elegant rubber-tired carriage, or a fine matched draft team with hand-sewed harness and best wagon, all complete, or an 80-acre farm in any one of a dozen states.

OUR PRIZES—We believe we have arranged for the best in every case. These are all prizes well worth working for. There is no element of chance. It is a test of skill pure and simple. If you can count, you can win.

JUDGES—The awarding of prizes will be wholly in the hands of the following persons. We are bound the contest must be absolutely fair, and certainly with such judges nobody can question it: Rev. Walter M. Walker, Pastor First Baptist Church; Hon. Frank D. Jackson, Ex-Governor of Iowa; Prof. Z. C. Thornburg, County Superintendent of Schools, Polk county.

OUR FINANCIAL RESPONSIBILITY—As to whether we are abundantly able to do as we say, we are glad to refer to Des Moines Savings Bank and Central State Bank. Our offer will be carried out to the letter.

Nobody connected with our paper will be allowed to compete. Contest closes May 31st, but get your counts in at once. See about Time Prize above. Anybody having three counts entered may enter additional counts at 25 cents each. The more counts you have, the better will be your chance for winning.

Publisher AMERICAN HOME MONTHLY, 155 7th St., Des Moines, Iowa.

I enclose $.....for subscription to American Monthly, and I wish to enter the..... (write ladies' or gents') Dot Contest. If $1.00 is paid send three counts; if more than $1.00 send one additional count for each 50c over $1.00; if only 50c is paid send ONLY ONE count. The $50.00 special prizes go only to those having THREE or more counts entered.

My count is: (1).....(2).....(3).....

Name.....

P. O.....State.....

Remarks: My plan of counting is.....

Some Winners in Past Contests

Piano—W. C. Elliott, Audubon, Iowa.
Piano—Mrs. L. W. Nott, Marion, Iowa.
Piano—Mira E. Fursman, Panola, Ill.
Piano—D. L. Freeborn, Knoxville, Pa.
$100—Amy R. Barnes, Van Horne, Ia.
$350—John A. Goodwin, Akron, Ohio.
$100—Eva I. Buckner, Fredonia, Kan.
$100—C. S. Wyman, Vinton, Iowa.
$50—S. Irving Stroyer, Baltimore, Md.
$100—E. M. Hall, Montrose, Mo.

We have a list of hundreds who have won $5, $10, $20, Bicycles, Free Trips, Pianos, etc. It will be sent you free upon request.

Address all letters to AMERICAN HOME MONTHLY, 155 7th St., DES MOINES, IOWA

CARDUI BABIES

Many homes are mere lonely abodes because no children are there. Barrenness exists in almost every case because female diseases have paralyzed the organs of womanhood.

Wine of Cardui imparts health and strength to the diseased parts and makes motherhood possible in thousands of cases where barrenness is supposed to be incurable. Wine of Cardui regulates the menstrual flow and also prevents miscarriage and cures bearing down pains. Wine of Cardui removes the cause of barrenness by making the female organism strong and healthy.

Go to your druggist and secure a $1.00 bottle of Wine of Cardui. The use of Wine of Cardui will bring happiness to your home.

In cases requiring special directions, address, giving symptoms, "The Ladies' Advisory Department," The Chattanooga Medicine Co., Chattanooga, Tennessee.

AMETHYST, COLO., Feb. 24, 1902.

Wine of Cardui is worth its weight in gold. It does more than you claim. It has saved my life and caused me to become a mother when everything else failed. MRS. DORA I. E. LeFEVRE.

BRYANT, VA., Feb. 18, 1902.

My daughter-in-law, Lizzie Giles, found great benefit in Wine of Cardui. She had a miscarriage in March 1901, before using your medicine. She was in very bad health, so I persuaded her to try Wine of Cardui. Since then she has had a fine baby boy. Soon he will be three weeks old. She highly recommends Wine of Cardui.

My daughter, Fannie Hudson, also has a fine baby boy by your treatment. She highly appreciates Wine of Cardui.

MRS. LOUISA GILES.

WINE of CARDUI

GET ONE FREE

THE SIGNAL MAIL BOX (Bates-Hawley Patent) is the original Rural Service Box. Especially commended by P. M. Gen'l. Full govt. size. Only complete box which meets every need. Write to-day for handsome booklet and our Free Offer SIGNAL MAIL BOX CO., 363 Benton St. JOLIET, ILL.

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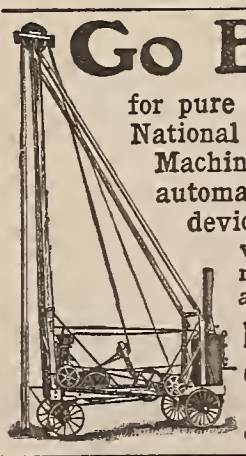

for pure water. Use the National Well Drilling Machine, equipped with automatic well pumping device. For drilling for water, oil, gas or mineral. All sizes for all depths. Address

National Drill & Mfg. Co. DEPT. A. Pullman Bldg. Chicago . Illinois

Free Gold Watch

This fully warranted Solid Gold Plated Watch, equal in appearance to a $35.00 Gold Filled Watch warranted 20 years, is given FREE to Boys and Girls or anyone for selling 20 pieces of our handsome jewelry at 10c. each. Send your address and we will send the jewelry postpaid, when sold send us the $2 and we will positively send you the watch, also a chain for quick work. Write to-day. BOND JEWELRY CO.- DEPT. 36 CHICAGO.

$3 a Day Sure Send us your address and we will show you how to make $3 a day absolutely sure; we furnish the work and teach you free, you work in the locality where you live. Send us your address and we will explain the business fully, remember we guarantee a clear profit of $3 for every day's work, absolutely sure. Write at once. ROYAL MANUFACTURING CO., Box 1048, Detroit, Mich.

WANTED Reliable men in every locality to introduce our goods, tacking up show-cards on trees, along roads and conspicuous places, also distributing small advertising matter. Commission or salary $60.00 per month and expenses not over $2.50 per day. Steady employment to good men. No experience needed. Write for particulars. EMPIRE MEDICINE COMPANY, Buffalo, N. Y.

Dakota Soil Subsoil, Grain and Grass Seed Samples, by mail, $1.00. Neatly boxed and postpaid. M. H. BARTLETT, Houghton, South Dakota

TAPE-WORM EXPELLED WITH HEAD. GUARANTEED. BOOKLET FREE. BYRON FIELD & CO., 182 STATE STREET, CHICAGO, ILL.

The Family Physician

By R. B. HOUSE, M.D.

Abortion of Felon

DR. J. R. EASTMAN, of Indiana, claims that a commencing felon will invariably be aborted by the local application of alcohol under perfect air-exclusion. Cotton is thoroughly saturated with the alcohol, and placed about the affected part, and a thin rubber finger-stall applied over all. Seventy-two hours usually suffices to give relief, and even effect a cure. He learned this in Von Bergmann's polyclinic in 1897, since which time he has not had occasion to lance a single felon the treatment of which was begun in time by this method. —Medical Council.

Hot Milk

Hot milk is a most nutritious beverage, a real luxury, the value of which but few people know. Many who have an abundance of milk never think of using it as a drink, or rather as an eatable, for we should eat milk instead of drinking it—that is, take it in small sips. Why? Because the casein of milk when it comes in contact with the acid of the gastric fluid coagulates and forms curd, and if swallowed in large quantities at once, a large curd is formed, which the stomach handles with difficulty. The gastric fluid can mingle much more readily with the small curds that result from sipping the milk.—Medical Fortnightly.

Modifying and Preventing Pitting in Smallpox

Dr. G. J. Jones, in "Medical Century" for December, 1903, says: "As soon as the pustules on the face are full, take a sharp needle, heat it in a flame, which thoroughly sterilizes it, and go over the face from one side to the other, opening these pustules—opening just enough to allow the pus to escape and relieve the tension. After they are scabbed over, just raise the margin of the scab. The philosophy of this opening process is that the pus will burrow unless you do it. The pustule is originally on the outside of the true skin. If it burrows into the skin there will be cicatrization, which cannot be prevented."

The Drinker

The temperance cause is receiving aid from various directions more calculated to produce good and lasting influence in deterring men from drink than all the laws in the world.

For instance, we find that American insurance companies are now agitating whether they shall not follow the example of the English companies, and make better rates to abstainers. A number are seriously inclined to adopt such a ruling, which is founded upon sound premises. Statistics prove conclusively that the abstainer has a longer lease on life; he is less exposed to accidents and current diseases, and the mechanism of his body undergoes less friction.

The drinker has fewer chances of remunerative employment. Corporations are more and more refusing to fill responsible positions with men who drink. A drinking man is unreliable. Drink leads to the downward path. Men who indulge in this practice are uncertain factors, and are not wanted. In a variety of the trades the men are learning for themselves the dangers of drink. Painters, carpenters, hod-carriers, and others whose calling exposes them to certain dangers requiring clear heads to avoid, have learned to let drink alone. A man who works all day on a swaying platform many feet above the ground, or climbs a ladder carrying a heavy load, does not want his faculties befuddled, his balance destroyed or his limbs made heavy and clumsy by drink. The abstainer enjoys better health than the drinker. The drinker's appetite is capricious, digestion impaired, nerves on edge. His kidneys are overworked and irritable. The continual passage of urine, inflamed by the agency of alcohol, over the prostate gland causes swelling and thickening of that organ, which cuts short the period of sexual vigor, and exposes the unfortunate tippler to all the horrors of catheter life. Unquestionably, the man who lets drink alone prolongs the period of sexual activity at least ten years.

The time is coming when men will be led by self-interest and observation of the deleterious effects of drink to let it alone. It is the plain duty of the doctor to contribute to and hasten this desirable end by pitting his scientific knowledge and professional influence openly and always against the practice. This he owes to mankind as an offset for the irremediable harm done by dead and gone generations of doctors, who were accustomed to sanction the use of spirits as tonics and appetizers.

$100.00 for a Name

WE WILL GIVE $100.00 IN CASH to the person who suggests the most appropriate name for our beautiful new picture, illustrated on this page. Any one ordering one of the pictures, together with a subscription to the FARM AND FIRESIDE, will be allowed to suggest one name.

We have referred to this picture heretofore as "The Chrysanthemum Girl," but we have decided that the picture deserves a better name, and we will pay $100.00 for it. Can you win the $100.00? See offers below.

$20.00 Extra for Quick Work

If the name the committee adopts is sent during this month (February), we will pay the person suggesting the name $20.00 additional to the above $100.00.

Reduced Illustration Size, 20 by 30 Inches

Our New Prize Picture

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. It is fresh from the artist's brush, and never before offered to the public, so that the FARM AND FIRESIDE readers have the first opportunity to secure a copy.

The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. Order as No. 54.

A LARGE GOLD FRAME

If you will notice the illustration you will see that the artist has displayed more than the usual amount of genius. He has painted a wide gilt border, in exact imitation of a gold frame, so that *a frame is not needed*. It has the full appearance of a handsome gold frame three inches in width. All that is necessary is to fasten the four corners to the wall with pins, and it will have the full effect of a magnificent picture in a heavy gold frame. It is quite proper at the present time to hang works of art without frames. However, this picture can be framed if you so desire.

SIZE

The size of this magnificent new work of art is about 20 by 30 inches, which makes a large and elegant wall-decoration. The cut on this page is greatly reduced in size.

TEN COLORS

The colors and tints, the lights and shadows that the artist uses in his make-up of this work of art create one of the most striking and exquisite pictures of its kind that we have ever seen. The artist has employed no less than ten of the most delicate and beautiful colors and gold in his creation of this charming work of art. **This picture is actually worth $1.00.**

THE SUBJECT

of this exquisite painting is that of a beautiful young woman wearing a gorgeous heavy lace-over-silk dress, making one of the prettiest and most expensive gowns ever produced. In her hair she wears a diamond crescent, and about her neck a costly pearl-and-diamond necklace. She is standing among beautiful chrysanthemums, which tend to produce a most delicate and pleasing effect. Altogether it is one of the most beautiful paintings of its kind ever produced, and we are sure that all who receive it will be more than pleased with it.

AN IMPARTIAL COMMITTEE will be appointed to choose from among the names that which they believe to be the most appropriate. The person suggesting the name which the committee adopts will receive $100.00 in cash.

The Contest Closes April 1, 1904

Ways to Get the $100.00 Prize

1st We will send one copy of this magnificent new picture, together with a whole year's subscription to the FARM AND FIRESIDE, new or renewal, and allow you to suggest one name for the picture, for only 40 cents. Order as No. 54.

2d You can accept any offer in our paper which includes a year's subscription to the FARM AND FIRESIDE, and add 10 cents extra for one of these pictures, and be entitled to suggest one name for the picture. Order as No. 54.

3d For One Dollar we will send three yearly subscriptions to the FARM AND FIRESIDE (regular clubbing rate is 35 cents each), and three pictures, and you will be entitled to suggest three different names for the picture. The papers and pictures can go to different addresses. Order as No. 54.

We will pay agents, canvassers and club-raisers a handsome cash commission to take orders in connection with yearly subscriptions to the FARM AND FIRESIDE, for this beautiful picture that needs no frame.

I suggest as the name for the picture _____

_____

Name of Sender _____

Post-office _____

County _____ *State* _____

Send your order for the paper and the picture (No. 54) on a separate sheet of paper. If you send more than one name, write the others on separate pieces of paper about 3 by 4 inches, with your name and address written thereon.

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO

Comrades of Travel

[CONTINUED FROM PAGE 19]

if I liked I could stay in the neighborhood a spell, and she would see I got my regular pay. She didn't speak a word agin her aunt nor about what I'd said, but I had a feeling all the time that she was thanking me. And when I told her that you and me was pertickler chums, and that I was going to write you, and would I put in her note, she twinkled them eyes, and said yes, if I wouldn't mind. So here it is. I don't know what's in it, but guess something about a job likely. And say, Page, if it is, you just snap the thing up—that is, if the pay's fair. Dorothy's a full team, and it'll be molasses to work under her. I'm going to stay right here till you come, and will put in my recommend; and I've an idea that it'll work, cause Dorothy seems to like me.

"Come right straight to Peacock Inn. That's where we be—though I'm keeping sort of shady in the background now, on account of the Duchess. Funny she ever come down here to Cocoanut Grove. 'Tain't no place to rustle silks. But I guess mebbe it's just the out-of-the-wayness of it she wanted. Trying to get up a deal between Dorothy and that Harry Thornton, and thinks it's best done off in a corner. Huh! It's going to take more'n old Shuteyes' millions to make a man of him, and Dorothy knows it. I ain't skeered of her. But say, about this Cocoanut Grove. It's a dandy place for fishing and telling stories. Ten and twenty, and even forty, pounders stick their noses out of the water most anywhere. You see 'em grinning all round the boat. They're looking to see if there's any dress-suits hunting 'em. Dress-suits and kid gloves don't cut no ice to Cocoanut Grove. Folks here is above 'em, and the fish, too. But they'll bite for common sense. Yes, sir-ee! Most breaks a man's heart to be forced into hurrying back shore just to save his boat from being swamped with fish.

"But say, Page, you come down, and see, and if it's a job that's hinted of in Dorothy's note, I believe you'll get it."

Inside of Wittles' big yellow envelope was a small white one. Page turned it caressingly before opening it. Finally he broke the seal. It read:

"MR PAGE WITHROW:—Isn't it provoking? But it seems that Aunt Kate has already planned an engagement for me, and she will hear to no excuse. So you must let me off this time. Some other day I hope to have the pleasure of a sail with you and that sweet Mrs. Payne. You may tell her so.

"DOROTHY HAMILTON."

[TO BE CONTINUED]

Catalogues Received

Darling & Co., Chicago, Ill. Poultry-food calendar.

Alexander Seed Company, Augusta, Ga. Thirty-first annual seed catalogue.

Allen L. Wood, Rochester, N. Y. Descriptive catalogue of small fruits, plants, etc.

Cole's Seed Store, Pella, Iowa. Garden annual of seeds for field, garden and lawn.

L. A. Banta, Ligonier, Ind. Illustrated catalogue of the Ormas incubators and brooders.

D. M. Ferry & Co., Detroit, Mich. Illustrated catalogue of garden, field and flower seeds.

A. T. Cook, Hydepark-on-the-Hudson, N. Y. Descriptive catalogue of farm and garden seeds.

Iowa Seed Company, Des Moines, Iowa. Illustrated catalogue of farm, garden and flower seeds.

Lilly, Bogardus & Co., Seattle-on-the-Sound, Wash. Illustrated catalogue of farm and garden seeds.

W. Atlee Burpee & Co., Philadelphia, Pa. Burpee's Farm Annual of field, flower and garden seeds.

Ross Brothers Seed House, Wichita, Kan. "Alfalfa Booklet"—how to grow and where to get the seed.

Sure Hatch Incubator Company, Indianapolis, Ind. Illustrated catalogue of the Automatic Sure Hatch incubator.

The Midland Manufacturing Company, Tarkio, Mo. Illustrated catalogue of the "Midland Two Row" corn-cultivators.

C. E. Whitten's Nurseries, Bridgman, Mich. Descriptive catalogue of small-fruit plants. Strawberry-plants a specialty.

Charter Gas Engine Company, Sterling, Ill. Illustrated catalogue of stationary and portable gas and gasolene engines.

Walter A. Wood Mowing and Reaping Machine Company, Hoosick Falls, N. Y. Illustrated catalogue of improved harvesting-machinery.

May Mean $100.00 Cash for You

We offer $100.00 in cash for the most appropriate name for our New Prize Picture, illustrated on page 22 of this issue of the FARM AND FIRESIDE.

Free Rheumatism Cure

25,000 Boxes Given Away to All Who Apply—A Scientific Discovery Which Will Revolutionize the Treatment of Rheumatism

DEFORMITIES OF HANDS AND FEET IN CHRONIC RHEUMATISM

It is now possible to be cured of any form of rheumatism without having your stomach turned upside down or being half choked to death, and every sufferer from rheumatism should welcome this new and marvelous discovery with open arms and give it an honest trial. This new remedy was discovered by John A. Smith, Milwaukee, Wis., who is generous enough to send a trial box free to every sufferer who writes at once. It is a home treatment, and will not keep you from your work.

As you know, if you've tried them, every so-called rheumatic remedy on the market to-day, except this genuine cure, will cause you violent stomach pains, and some of them are so dangerous they will cause heart trouble. And the worst of it is, they never cure. When a person has rheumatism, the constitution is so run down that he should be very careful what he puts into his stomach.

It therefore gives me pleasure to present a remedy that will cure every form and variety of rheumatism without one single unpleasant feeling. That remedy is

"GLORIA TONIC"

Before I decided to tell the world about the discovery of "Gloria Tonic" I had it tried on old crippled persons, with perfect success. But some people never will believe anything until they know it from experience, so the best and quickest way is for you to write me that you want to be cured, and I will send you a trial box of "Gloria Tonic" free of cost. No matter what your form of rheumatism is—acute, chronic, muscular, inflammatory, sciatic, neuralgia, gout, lumbago, etc.—"Gloria Tonic" will surely cure you. Do not mind if other remedies have failed you, nor mind if doctors say you are incurable. Mind no one, but write me to-day sure. "Gloria Tonic" will stop those aches and pains and inflammations, and cure you so that life will again be worth living. This offer is not for curiosity seekers, but is made to rheumatics only. To them I will send a trial box of "Gloria Tonic" free.

Never before has a remedy been so highly endorsed as "Gloria Tonic." It has been endorsed by such world-noted men as Dr. Quintero, of the University of Venezuela; Hon. E. H. Plumacher, United States Consul, Maracaibo; Prof. Macadam, of Surgeons' Hall, Edinburgh; the famous magazine, "Health," London, and a column of others.

If you are a sufferer, send your name to-day, and by return mail you will receive a trial box of "Gloria Tonic," and also the most elaborate book ever written on the subject of rheumatism, absolutely free. This book contains many drawings from actual life, and will tell you all about your case. You get "Gloria Tonic" and this wonderful book at the same time, both free, so let me hear from you at once, and soon you will be cured. Address JOHN A. SMITH, 3188 Germania Building, Milwaukee, Wis., U. S. A.

Send no money or stamps.

We Make 2 3 5 & 8 Horse Power Engines.

Greatest Opportunity Ever Offered

For 85.00 We'll Sell You The Best Gasoline Engine ever made **The CHICAGO**

a complete engine in every detail, erected on wood base, self-contained, with Electric Spark Igniter, Water and Gasoline Tanks, Batteries and connections, all ready to run. Each engine thoroughly tested and **Guaranteed Absolutely Perfect,** and

Full 2 Horse Power with pulley for running all kinds of machinery by belt.

Pumping attachment as shown in cut $12.00 extra.

Simplest engine ever produced. Results of 14 years experience. Fewer Parts, Highest Efficiency, Greatest Economy, Lowest Price. OTHER SIZES AT PROPORTIONATE PRICES. We make 3, 5 and 8 Horse Power engines all on same lines.

Cut This Ad Out and send it to us and we will mail you catalogue free, it shows large cuts, gives full description and more information on gasoline engines than was ever given before. We have revolutionized the gasoline engine business. Catalog tells what we have learned in 14 years. **Chicago Gasoline Engine Co.** 57 North Jefferson St. **Chicago.**

A crop that pays may not pay as well as it should.

Potash

is a plant food which all crops must have. Without sufficient Potash to feed upon no crop can reach that point where it pays *best.*

Experiments have demonstrated the value of Potash.

We will send free, to any farmer who will write for it, a little book that will give facts in full.

GERMAN KALI WORKS, 93 Nassau Street New York

YOU LOSE YOUR TEMPER

with a badaxe, but you don't draw temper while you grind eight times as fast as emery wheels on the electric diamond stone, **Carborundum,** making 4,000 revolutions a minute with the

Bi-Pedal Sickle and Tool Grinder.

For Sickles, Edge Tools, Saw Gummer and Polishing Machine, 4 in one. **Special to Farmers. $34 worth of machinery for $8.50. Ten Days Free Trial.** Return at our expense if not satisfied. Ask for beautiful free sample of carborundum and booklet. **Agents Wanted.** F. Luther Bros. Company, 3 Penn St., N. Milwaukee, Wis.

Compressed-Air Sprayers

Two and four gallon sizes. Made of heavy galvanized iron; also brass. For gardens, orchards, lawns, shrubbery, chicken-houses, etc. No continuous pumping. Compressed-air device sprays continually. Send $1.50 for sample. *Big money for Agents. Address* D. B. SMITH & CO., Utica, N. Y., U.S.A., Dept. B

Berry Boxes and Baskets

Fruit and Vegetable Packages of every kind. Send for catalogue. New Albany Box & Basket Co., New Albany, Ind.

SPRAY with **EMPIRE** the **KING** or **ORCHARD MONARCH** PERFECT AGITATORS with Automatic Brush for cleaning strainer. No leather or rubber valves. All styles of Spray Pumps. Book free. "No swindled feeling if you use our pumps." Field Force Pump Co. 300 11th St. Elmira, N.Y.

EVERGREENS. Largest stock in America, including Colorado Blue Spruce and Douglas Spruce of Colorado. Also *Ornamental, Shade and Forest Trees, Tree Seeds, Etc.* R. DOUGLAS' SONS Waukegan, Ill.

450,000 TREES 200 varieties. Also Grapes, Small Fruits etc. Best rooted stock. Genuine, cheap. 2 sample currants mailed for 10c. Desc. price list free. LEWIS ROESCH, Fredonia, N. Y.

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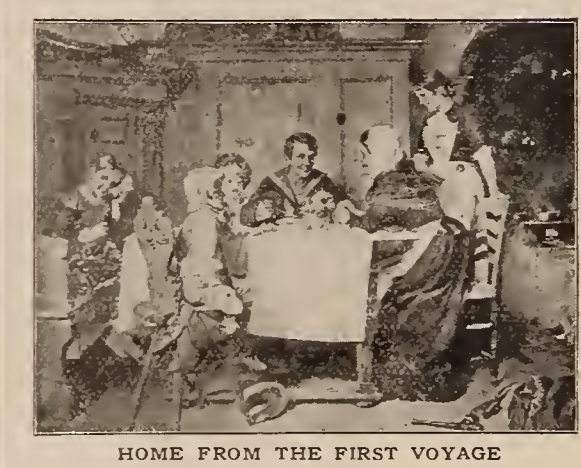

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Wit and Humor

His Besetting Sin

EPHRAIM was a man of importance, being an elder in the Baptist church and much given to exhortation, prayer and song. His cabin was the scene of many a "revival," and the powerful prayers offered by Ephraim on these occasions were the wonder and admiration of the colored population.

With all his religious ardor, however, there were times when the pleasures of the world appealed strongly to him. Seeing him approach one morning with downcast eyes and an air of real dejection, Colonel Snead accosted him thus: "Hello, Eph! you look as if you were going to your own funeral. What's the matter?"

"Well, Kunnel, I feels bad, suh," replied Eph. "De 'casion am a ser'ous one, suh. You know de young folks done hab a party at Nick Finney's de udder night. an' as Ise been a-wrastlin' in pray'r fo' de salvation ob Nick's soul fo' a pow'ful long time, I done thought I'd 'cept de invertation an' go, an' maybe I mout drap a word or two dat would tech his heart. But dey was mighty leetle chance ter talk ter Nick 'bout 'ligion, fo' dat niggah will dance wheneber he heah a fiddle. Well, suh, I went, an' now dey claims as how I was a-dancin', an' Ise ter be tried ter-day an' put outen de chu'ch."

"Well, Eph, that's pretty hard luck, but they ought to know that an elder of your standing would not indulge in anything so worldly as dancing," replied the Colonel, with a twinkle in his eye, well knowing that Eph's besetting sin was not tripping the light fantastic.

"I hopes so, Kunnel, I hopes so," rejoined Eph, in a tone of utter despair, as he trudged on toward the town.

Late the same afternoon Colonel Snead heard a voice singing lustily, "Ise gwine ter jine de band," and recognizing Eph, he asked, "How did the trial go, Eph?"

"Dey cl'ar'd me, Kunnel, bress de Lawd! 'Dey cl'ar'd me."

"Cleared you, did they? That's good. Then you proved you'd not been dancing?" said the Colonel.

"No, suh, Kunnel; dey proved it on me all right, but dey 'lowed I was drunk an' didn' know what I was doin', so dey cl'ar'd me, Kunnel, bress de Lawd!"—Lippincott's.

Webster Was Willing

When Daniel Webster's marketman had sued him for a long-unpaid bill, and got his money, he was so scared at his temerity that he stopped calling at the door for orders. The godlike Daniel asked him why one day, and the man confessed that he supposed Mr. Webster would never trade with him again. "Oh," said Webster, "sue me as often as you like, but for heaven's sake don't starve me."

There was never a time when the great man was not willing to owe as much as anybody was willing to let him owe.—Springfield Republican.

A Close-Fisted Roman, Surely

Booker T. Washington is credited with telling of a confab he had with the sexton of a negro church in which he had interested himself to the extent of starting a subscription list for a new meeting-place. The sexton, who knew every member of the congregation intimately, ran, down the list of names with Mr. Washington, commenting as he went along: "Mr. Smif—he's good fo' a dollah; Mr. Perkins—he's good fo' five dollahs at least; Mr. Leedom—very religious, Massa Washington, but poor."

Mr. Washington made notes as he went along. Finally the sexton read:

"Mr. ——. He am rich enough, but stingy as Cæsah—stingy as Cæsah!"

"Why do you think Cæsar was stingy?" asked Mr. Washington.

"'Cause, Massa Washington, when de Pharisees gabe our Lord a penny he axed dem, 'Whose subscription am dis?' an' dey answered, 'Cæsah's.'"—Philadelphia Times.

Not Sure

A doctor was attending a dangerous case where a Scotch butler was engaged. On calling in the forenoon he said to the butler as the latter admitted him. "Donald, I hope your master's temperature is much lower to-day than it was when I called to see him last night."

"I'm nae sae very sure aboot that," replied the butler, "for he dee'd this mornin'."—Argonaut.

"Why," observed the young wife, "this is not the same kind of a calendar as you usually get."

"No," said her husband. "The insurance firm that used to furnish them to me has gone out of business."

"But do you think this one will be as reliable as the others? Someway I am always suspicious of new and untried goods."

RIGHT

"Man loves only once."

"But he's great on experimenting."

Snide Lights on History

Robert Bruce lay in bed looking up at the ceiling, when he saw a spider. Enraged beyond his wont, he threw on his bath-robe and went down to the office.

"There's a spider in my room!" shouted Bruce.

"Dinna ye greet sae sair, chield," said the hotel clerk, appeasingly. "Do ye expect a hippopotamus?"

This shows that hotel clerks are no respecters of persons.

Marie Antoinette was gossiping with Madame Recamier about the Bal Poudre.

"Did you get a pike at Queen Elizabeth?" asked Marie. "She looked awful tacky to me."

"Yes," said France's peerless beauty, "and that was a frightful-looking collar she had on."

All of which was a little ruff on good Queen Bess.—Chicago Journal.

The Wit of Justice Mathew

Notwithstanding his twenty-two years of service on the bench, Lord Justice Mathew still preserves that elasticity of spirit and love of a joke which has distinguished him all through his career. One of his remarks a few days ago created great merriment in the Court of Appeals. A learned King's Counsel was arguing the question as to what is an "accident," and was putting instances of what he considered would probably come within that term, and what, on the other hand, would not. "Suppose," said he, "some one were to hit me in the eye, and my eye became black in consequence; the fact of it becoming black could not be called an accident."

"Perhaps not," said the Lord Justice; "but you would doubtless explain it on that ground."—Westminster Gazette.

Willing to Do His Part

An old farmer once took tea with a former Duke and Duchess of Buccleuch at Drumlanrig Castle, his grace's Dumfriesshire estate.

His first cup of tea was gone almost before the Duchess had poured it out. Again and again his cup was passed along to the head of the table. At the sixteenth cup the Duchess became uneasy about the supply on hand. "How many cups do you take, John?" she asked the farmer.

"How mony do ye gie?" John asked, cannily.—St. James Budget.

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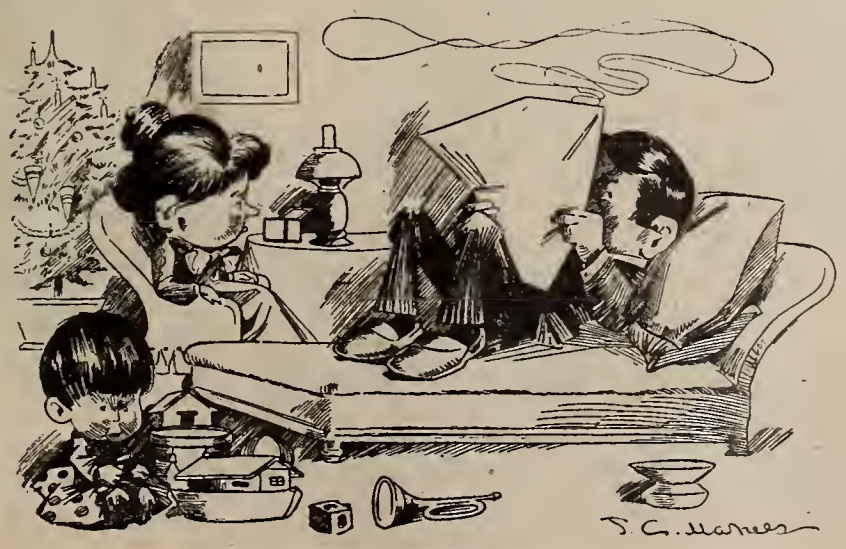

COULDN'T DO IT

Mrs. Bargain Hunter—"Why don't you smoke those cigars I gave you Christmas? You haven't given them away, have you?"

Mr. Bargain Hunter—"The idea! Do you suppose I'd be mean enough to do such a thing as that?"

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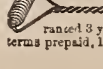

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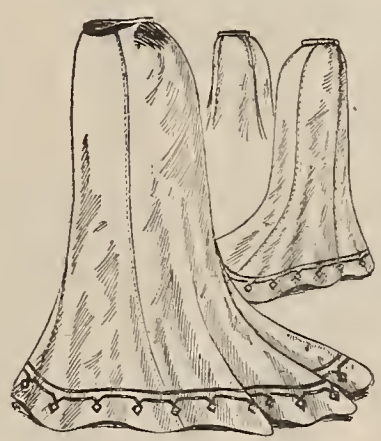

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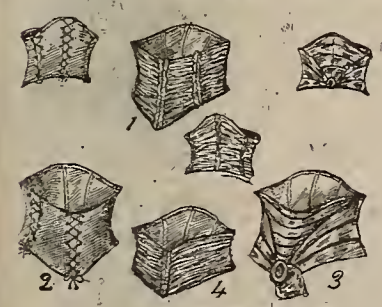

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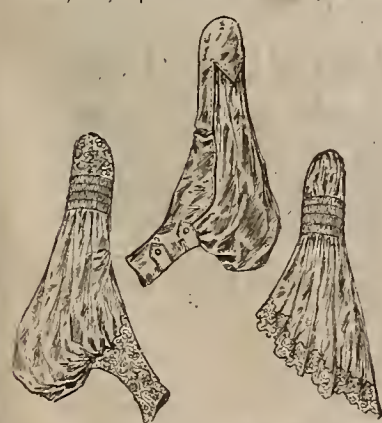

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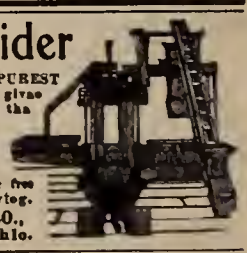

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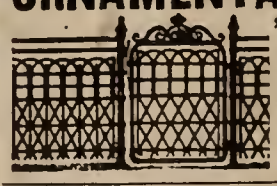

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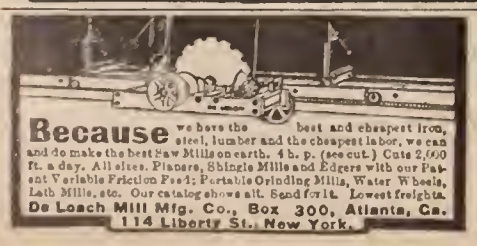

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Vol. XXVII. No. 10 EASTERN EDITION FEBRUARY 15, 1904 TERMS { 50 CENTS A YEAR 24 NUMBERS

F. D. COBURN

Chief of the Department of Live Stock, Louisiana Purchase Exposition, and Secretary of the Kansas State Board of Agricultare

THE chief of the Department of Live Stock of the Louisiana Purchase Exposition, F. D. Coburn. was appointed to that position in December, 1902, and went to the exposition on leave of absence from the secretaryship of the Kansas State Board of Agriculture. The latter organization allowed Mr. Coburn to assume the added duties with the distinct understanding that he was simply loaned to the World's Fair management, and he still directs the work of his office at Topeka in addition to that at St Louis.

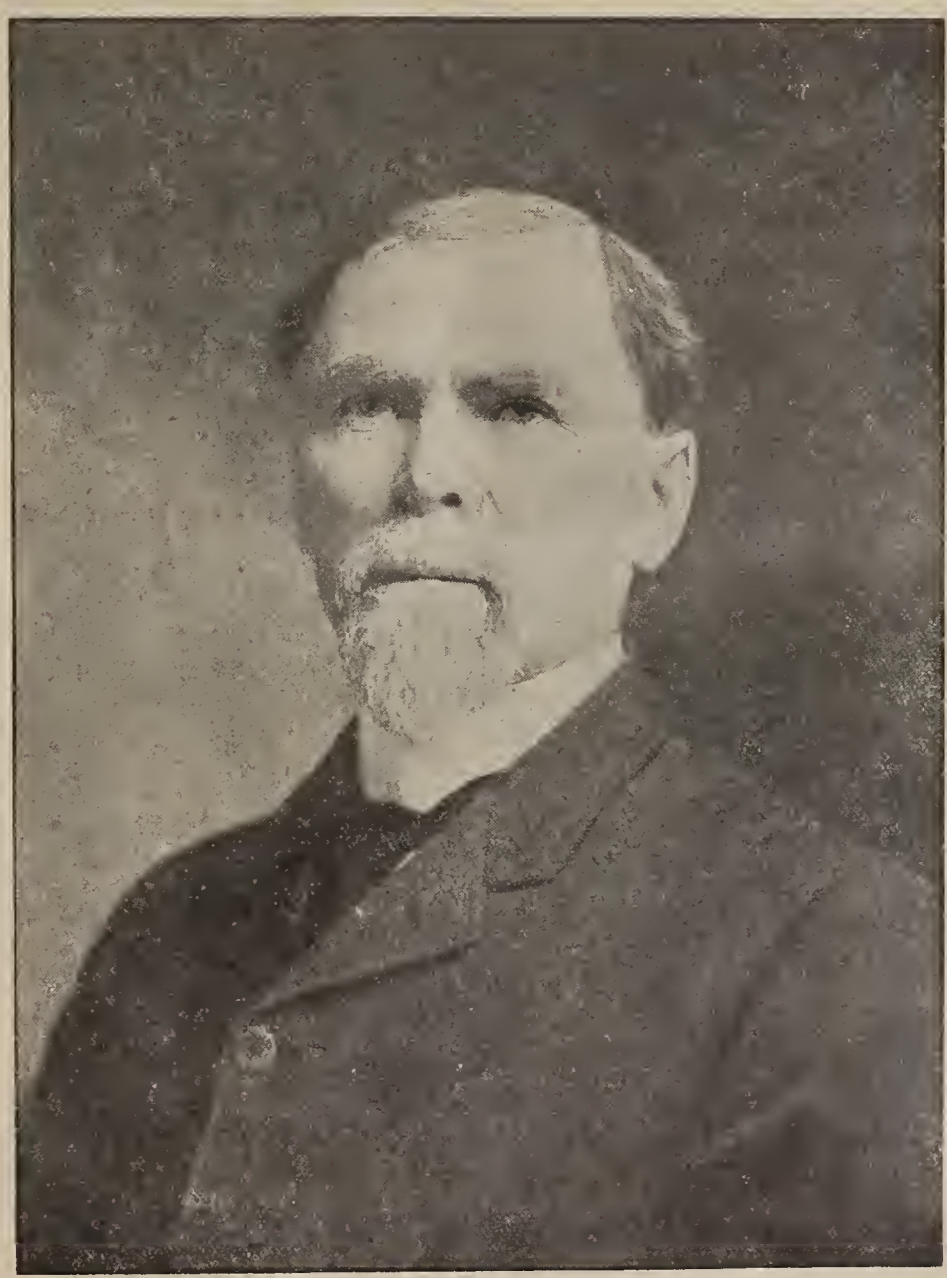
As an editor Mr. Coburn suggested the first live-stock show held in the Louisiana Purchase territory. and later presided at its organization. Since then he has kept up with the times in matters pertaining to agriculture and live stock at the larger fairs and expositions, both in connection with his work as secretary of the Kansas State Board of Agriculture and through other official positions. At New Orleans Mr. Coburn awarded all prizes given for exhibits of swine at the exposition of 1884. He was the sole judge of four different breeds of swine at the Columbian Exposition in Chicago in 1893, and one of the committee of three who made all other swine awards at that world's fair.

Mr. Coburn's selection as chief of the Live Stock Department of the Universal Exposition at St. Louis was without solicitation and wholly unexpected on his part, and made after the management had given long and careful consideration to the claims of a number of very able gentlemen who were aspirants and who presented indorsements of the highest order. The World's Fair directors had no doubt as to Mr. Coburn's capacity. His service for the Kansas State Board of Agriculture has made the Kansas "red line" series of agricultural reports authoritative wherever agriculture, animal husbandry and dairying are factors of prosperity. His "Swine Husbandry" has stood as the best book upon the subject of which it treats since it was published, more than a quarter of a century ago, and his "Alfalfa" is recognized as the standard authority upon that invaluable product. The leading improved-cattle breeders' associations have by resolution given their unqualified thanks for his publications relating to cattle husbandry. "The Horse Useful," "Cow Culture," "Modern Dairying," "The Helpful Hen" and "The Modern Sheep" are among the determinative books he has contributed to these industries. In addition to an immense amount of work along these lines, Mr. Coburn has been a contributor on live-stock and agricultural subjects to the leading encyclopedias.

Mr. Coburn was born on a farm in Jefferson County, Wisconsin, in May, 1846. He served in the Civil War in two Illinois regiments, was mustered out in 1866, and went to Kansas the next year, walking across the Missouri River on the ice to reach the state he has since so notably served. He was actively engaged as a farmer and breeder of improved live stock until 1880, when he was called to Topeka in the service of the State Board of Agriculture. A year later he was made secretary of the Board, but shortly after became the editor of a prominent live-stock journal. In 1894 he was again elected secretary, and his reëlection at each succeeding biennial meeting of the Board has been unanimous and by acclamation. During the last decade of his work with the Kansas Board of Agriculture Mr. Coburn has prepared fifteen books on agricultural subjects for the Board in addition to his regular reports as secretary.

Mr. Coburn has also been a regent or president of the Board of Regents of the Kansas State Agricultural College for many years. He was married in 1867 to Miss Lou Jenkins, of Kansas. They have two daughters and a son, all of whom are graduates of the Kansas State Agricultural College.

A magazine-writer said recently that Mr. Coburn has two key-words—work and accuracy. It is a favorite saying among his friends that his idea of recreation is a little more work. He sometimes alludes to his methods of work as having always been, whether he would or no, adjusted to the eight-hour system—namely, "eight hours in the forenoon and eight hours in the afternoon." His department at the exposition was one of the last to be organized, but in about a half-year's time he had prepared and submitted a classification wholly unprecedented in its thoroughness, breadth, and its distribution of prize-money. The comprehensiveness which Mr. Coburn puts into his tasks is exemplified in the fact that this complicated work, bearing upon so many conflicting interests, has been accepted without material adverse criticism.



F. D. COBURN

Seeding Grass and Clover for Pasture

While the practice of sowing grass and clover seed with grain is a general one, it is in no sense necessary. In case of a dry season, the grain, instead of acting as a nurse-crop, in reality becomes a robber to the young grass-plants. The Wisconsin Experiment Station makes the point that "young grasses and clover-plants are not injured by direct sunlight and heat from the sun any more than other plants of our field." This fact can be practically observed at any time when the weather is even moderately dry around harvesting-time. While the grain is in the milk, and up to the time of cutting, drawing much moisture from the soil, the stand of clover and timothy may seem very poor, and in places almost nothing. Its growth during the summer thus far, unless it has been an exceptionally moist season, has been very slight. When the grain is cut, and after the first rain, more growth is made in the following two weeks than has been accomplished up to that time. Also, in patches where the clover and grass has caught, but where no grain has been sown, the growth of the former will be heavy. It is likely in this case, however, to be mixed with weeds, and this is one advantage claimed for sowing grass and clover with grain in a rich soil. If the season is favorable, the vigorous growth of the grain will choke out the weeds.

Experiments made by the Wisconsin station during a period of years have shown that "grasses and clover sown by themselves on properly prepared soil spring up at once, and make rapid growth, bearing seed-heads the same year. If all conditions as to fertility of soil, moisture, etc., are favorable, a very excellent crop of hay can be secured the same season." The weed objection can be remedied by running the mower over the fields about six inches high, cutting the weeds, but not injuring the grass. However, this method of planting should not be attempted unless the ground is comparatively free from weed-seeds in the first place. The ground, too, should be carefully prepared and fined, and fully twice the usual amount of seed sown. The Wisconsin station has had excellent results sowing in early spring, but no better than those obtained at the New Jersey station with fall preparation and sowing. M.

Notes and Comment

The celery crop around Kalamazoo, Mich., amounted to seven million bunches, valued at five hundred thousand dollars, in 1903. About five thousand acres were devoted to its cultivation.

Secretary Wilson in a January 7th interview said, "Good crops insure the nation against panics. I have the greatest confidence in the agriculturalist as the real sustaining power of the prosperity of the United States."

The United States Consul at Frankfort, Germany, calls attention to the increasing use of hazelnuts at hotels and private houses. Owing to the large quantities imported, he suggests that farmers' children in the United States might supply themselves with money for incidental expenses by growing hazelnuts for home and foreign markets.

The California way of burning brush in the orchard as rapidly as the trees are pruned is to place a large sheet-iron box over iron axles and wheels, so that it can be hauled between the trees. The bottom of the iron box, or burner, is considerably smaller than the flaring, open top. This plan saves labor, and the ashes from the burned brush can be used where most needed.

It is reported that Yolo County, California, will make an exhibit of Japanese buckwheat at the St. Louis Exposition. It was planted August 1st, and harvested September 16th, and yielded about thirty-six bushels to the acre. The first distribution of this variety was made by the United States Department of Agriculture in 1888. The annual reports of the department for 1889 and 1890 show that the yield was one third greater than the Silver Hull or other varieties. Seed from such crops as that grown in Yolo County would prove of great value in the eastern section of the United States, as this variety resists drought better than the common ones, and is adapted to all localities, from the Great Lakes to the Gulf of Mexico. * * *

FARM AND FIRESIDE

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Mr. Greiner Says:

FRUIT-GROWERS' MEETING.—Early in January the New York State Fruit-growers' Association held its third annual meeting at Geneva, the seat of the New York State Experiment Station. This youngest of such and similar societies holds its own in membership, usefulness and importance pretty well with the oldest and best of them, outranking in some respects even the famous old Western New York Horticultural Society, its parent body. The 1905 meeting is to held at Geneva.

BIRDS AND INSECTS.—In his report on entomology, Prof. M. V. Slingerland, Cornell's famous "bugman," said: "If you hope even in a small way to fight the insects that go to make up the rogues' gallery of fruit-pests, encourage the winter birds to stay in the orchards by putting meat or suet in the trees. We believe they would exert a great influence in lessening the number of psyllas, codling-moths, canker-worms and many other fruit-pests. Encourage the birds, for they are one of the most important balance-wheels of nature." I have at times been hard on the summer birds, but have never failed to appreciate the services of the winter birds (and I include the despised English sparrow in the list), as they destroy quantities of insects, insect eggs, and weed-seeds besides.

PARCELS POST.—One good thing which the New York fruit-growers did at Geneva was to put themselves on record (by unanimous vote) as favoring—demanding, rather—the establishment of a parcels post such as is in successful operation in every other civilized country. Retail consumers could thus be supplied directly by the grower, and the grower could receive in exchange many of his supplies speedily and at cheap rate of transportation. The express companies, which have a representative even in the United States Senate, are, of course, opposed to any such innovation, and have been able to block the way right along. Thus a person in Germany can send a package to any part of the United States at a cheaper rate than we can mail it from one place in the United States to another, even if only a few miles apart.

STORAGE OF APPLES.—Mr. G. Harold Powell, of the Division of Pomology, Department of Agriculture, Washington, in his address on handling the apple crop for storage, said: "Quick storage after the fruit is picked is essential to the long keeping of fruit in cold storage if the warehouse is warm at picking-time. Delaying the storage of fruit not only causes it to ripen, but the disease with which it may be affected will develop rapidly, and cause rotting prematurely. A large proportion of the difficulties in cold storage are due to the abuses to which the fruit is subjected between its picking and storing. . . . Highly colored fruit is stored quickly after picking in a temperature of thirty-one to thirty-two degrees, and removed from the warehouse early in the season."

SELLING FRUITS.—From its very inception the New York State Fruit-growers' Association has always favored the consideration of the commercial side of fruit-growing, recognizing that growing fruits is one thing, and selling them another, and that organized efforts are imperatively needed in order to insure to the producer his proper share of the money which the consumer pays for his fruits. The careful crop reports gathered and furnished to the members in July, August and September of each year, and which serve as a check to the crop reports sent out by the Department in Washington and by the National Applegrowers' Association, as also the coöperative efforts for the wholesale purchase of fertilizers, chemicals, etc., make the membership in this association particularly valuable and profitable to the commercial grower of fruits, especially apples. Buying through the association, the member saves several dollars on each ton of fertilizer, and is able to purchase his copper sulphate, etc., at the lowest cash prices.

APPLES AN ANNUAL CROP.—The question was asked whether an orchard could not be made to produce a crop every year. Professor Craig says, "Theoretically, yes; practically, no." It is very difficult to so regulate the crops that the orchard will not overbear. Mr. Udell, however, states that he has an orchard of Baldwins that has given him four crops in succession. Growers are trying to block the laws of nature—they either trim too much or not enough. Professor Beach gives it as his opinion that annual crops may be grown with some sorts, while with others he would not guarantee that it is feasible. Rome Beauty is one of the regular bearers. The tendency seems to be that way. In quality it is not equal to Baldwin. Hubbardston Nonesuch is another apple with a tendency to bear annually. The location of an orchard may have something to do with this. King is variable.

THE COMMERCIAL SIDE.—Nobody can be more competent to talk about the commercial side of fruit-growing than Mr. J. H. Hale, of Connecticut, a wholesale producer of peaches, and a shrewd and experienced seller. He declared that in the past too much attention has been paid to the question of varieties and production, and too little to the marketing problem. Study the markets. Find out what people want, and then give it to them. Farmers have not yet become adepts in the art of advertising. The consumer likes to deal directly with the producer, and the man who hunts up this trade, and follows it up, will reap the largest profits. Mr. Hale's remarks probably apply with equal force to the sale of vegetables, and possibly other products. His methods are safe in any line of produce. He grows good fruit, packs it in neat packages suited to the needs of retail customers, and then puts a circular or card bearing his advertisement in the bottom of every package.

RAPID GROWTH OF FRUIT INDUSTRY.—Mr. Hale stated that ten years ago there were less than a million peach-trees in Georgia orchards. This fall the state had eighteen million, and three million more will be planted this winter. In Alabama, Arkansas and Missouri we find fifteen million or twenty million more peach-trees, and the planting is going on right along. The apple-growers in Missouri have also extended their orchards enormously, and single orchards of from one hundred to three hundred acres are not uncommon. Ten years ago not a car-load of cantaloups was shipped anywhere in the country. Now the cantaloup season extends from May to November, and from five to six thousand cars were shipped last season. The strawberry season lasts from January until August. This development means much for the owner of land in America. With such an increase in the production, one might think that the country must be flooded with fruit, and the business soon be overdone and become unprofitable. In fact, for many years, while observing this feverish activity in planting fruit trees and vines we have feared that just such a thing would happen. Fifteen years ago we already talked of overproduction, and yet even to-day the up-to-date fruit-grower is the one who makes the money. With the increased production has also come a wonderful increase in the demand for fruit. People want fruit three times a day, and fruit has passed from the status of being an article of luxury to that of necessity and daily consumption.

PACKAGES.—The scarcity of apple-barrels last fall was a great annoyance to many of us apple-growers, and we had to pay a big slice of our profits for the privilege of putting our fruit into these formerly popular packages. Some of our cold-storage houses furnished bushel crates to the growers whose stock they bought, and stored the fruit in these handy packages. Mr. Hale says it is a mistake to use barrels. They are too big a package. We should study out the largest kind of package that will go into the homes. The New York Fruit-growers' Association can boast of having shown one of the finest exhibits of fruits (although not the largest) ever seen anywhere. Among the exhibits were bushel boxes of choice fruit that were a delight to inspect, almost every specimen being perfect. Such fruit thus packed will sell in any market, and bring a fancy price. Undoubtedly many homes would accept the bushel-box package, others perhaps would prefer the half-bushel, and possibly still others might take a peck package when they would not take the larger quantity. People seem to like fancy packages and to be willing to pay for them. They pay twelve cents or more for a pound of crackers done up in a fancy paper box, when they can get just as good crackers done up in a plain bag at seven or eight cents a pound. All our breakfast foods, every imaginable article that used to be weighed out by the grocer and put into a simple paper wrapper or bag, now comes in a fancy paper box. Sugar is done up in cloth bags, etc. People pay a good deal of money for the packages. They pay for the convenience, for the better chance of putting things up together and carrying them. And possibly things done up nicely and attractively taste better, for imagination goes a great way. And things done up securely in boxes, even of paper, keep better. Fruit-growers, and perhaps vegetable-growers, too, may have to come to it—apples, plums, peaches, grapes, etc., may yet have to be packed in four or eight quart paper boxes, and thus retailed out by the grocer, rather than in loose measure from the ordinary barrel of ordinary fruit. But such method of packing means better fruit. The trash that goes in the center of the barrel cannot be worked off in that way, which is another advantage.

Mr. Grundy Says:

THE FARMER'S GARDEN.—And now for spring! To be sure, it is not quite here, but the rapidly lengthening days and the sun away up at noontime is good evidence that it is not far away. In a few days the bluebirds will be here, then the robins, and one after another all the other spring and summer favorites. We will have cold days and frost, and possibly snow-storms, before spring is fairly on, but a fellow can't help looking longingly at the old familiar tools he is almost aching to get to work with.

About the first thing the sensible, practical, down-to-date farmer thinks of is the garden. He knows that hot days and hard work are coming, and that he must have a change of diet to enable him to do what he hopes to do. He must eat more vegetables and less fat meat to keep in a healthy condition, and these vegetables must come from the garden. Now is the time to prepare for it. I have found it a good and very helpful plan to draw a plat of the garden on a piece of paper, and indicate by lines where each variety of vegetable shall be planted. One can easily ascertain the length and breadth of the garden-plat, and by a little figuring can fix the matter to a nicety.

Last year I drew such a plat, and arranged for everything I wished to grow, and it seemed to me that the actual work was as easy as setting trees in holes already dug. I grow radishes in a long bed four feet wide with a narrow path on each side. The little early, bobbed-off turnip-radishes come first, then comes the old Long Scarlet, and then comes the Lady Finger. The first have a very small top, and they are planted in rows four inches apart. The tops of the others are larger, and I make the rows eight inches apart. Many gardeners have them six inches apart, but in the family garden I have found eight inches more satisfactory. As soon as the little early ones are out, I dig the bed over, and sow Lady Fingers in it. Usually these are our latest. When berries begin to ripen we do not care much for radishes, and we do not grow them. Our first bed of lettuce is Curled Simpson sown in rows six inches apart, and the next the same sown ten inches apart. When the first bed is used up, it is dug over, and set with a standard variety of cabbage-lettuce, the seed of which is sown in a little plat as early as the soil can be worked. The plants are set ten inches apart in rows twelve inches apart, and when full-grown they take up all the space. This cabbage-lettuce comes on in the early summer, and as we are very fond of it, we set out lots of it.

A few days ago my wife and I were talking about the many good things in the way of appetizing food we get from the garden, and we decided that fully one half of our living comes out of it. First comes asparagus for "greens," and rhubarb for pies and sauce, then radishes and lettuce and onions, followed by peas, beets, beans, early potatoes, sweet corn and cabbage, and luscious melons as the days grow hot. In fruits comes the gooseberry for sauce and pies before its seeds get hard and the acid in it gets strong enough to lift hair. This is followed by the strawberry, raspberry, cherry, plum, peach, apple, pear and grape, and finally, the best of all, the winter apple. Surely there are enough of the best of good things to make any farmer thankful that he is a farmer and can have the very best of all these things in glorious perfection.

GARDEN-CULTIVATORS.—Let me again advise all farmers who desire to have a full and complete garden to purchase one of the garden-cultivators, or wheel-hoes, sold by all seedsmen. I have two of these, and while there may be better ones, I find these so useful in the garden that I scarcely know how I could garden without them. Both of mine are old patterns, as I bought them several years ago, but they enable me to do the work—that is, the main part of it—about ten times faster than I could with a hoe. One of them has two wheels, and the other one. The two-wheeled implement straddles the row, and the other runs between. Sometimes I think the two-wheeled one is the best, and sometimes the other, and I would hardly know which to recommend the highest. Those of my gardening friends who have a single-wheel think they are well fixed, while those who have one with two wheels would not care to swap with the other fellows. The fact is, both are so useful that they are well-nigh indispensable to the busy man, and especially to the farmer who has but little time to give to the garden. Plant all your main crop of vegetables in rows not less than fifty feet long, and far enough apart for a wheel-hoe to do good work among them, and the question of a good garden will be solved so far as you are concerned, and instead of despising the job of "cleaning out the garden," you will take delight in keeping it clean, because it can be done so easily. Last year two men who bought garden-cultivators complained to me that they were so hard to work that they preferred to hoe. One of them said he "would just as leave push a balky mule as one of them plows." After I explained to him the proper manner of working it, he tried it again, and then wrote me saying that he was more than pleased with it, and that if he had not been such a blockhead he would have caught on at the outset. The right way to work a garden-cultivator is to push it along about a foot at a time, drawing it back about half that distance each time. Each time it is drawn back the hoes should be raised so that they merely touch the surface of the ground. Do not attempt to plow with it, but cultivate the surface about an inch deep. After one learns the proper method of pushing it forward and drawing back, and at the same time moving first one foot forward and then the other, he can do effective work rapidly. When in a hurry I shove the implement forward about two feet at a stroke, draw back a little as I step forward, and hustle right along. It is hardly necessary to tell the live farmer that the hoes should be kept sharp and bright and the axles well oiled.

All Over the Farm

Farm Theory and Practice

THE SOILING SYSTEM.—Local conditions may unduly influence the opinions and the advice of men who write for papers of wide circulation. Some strong advocates of the plan of harvesting all the feed for farm animals are thus influenced. An old correspondent of an Eastern agricultural journal states his view thus: "In all probability the time is not far distant when there will not be much pasturing done anywhere except in the arid regions unfit for grain-raising or dairy-farming." It is true that more animals can be kept on a farm when the feed can be grown and fed to them in the stable the year round. Pasturing is wasteful both on account of the tramping, and the injury that results from too close cropping of the plant. But it is not a question as to the maximum number of cattle that can be kept on a farm as a rule, but it is a question as to the number that can be kept with profit. The cost of labor and the loss to the soil from plowing are big considerations on most farms.

The amount of agricultural land in this country is so great in comparison with the number of people to be fed that there can be no approach to maximum production to the acre for a long time to come. Any rise in the price of farm products is never due to any actual scarcity of land, but it is usually the result of a change in the labor market or of temporary crop-failure. Purchasing power is increased by good wages in mills and mines, or cost of production is increased by rise in farm wages. Usually both influences are at work. Labor is the factor that influences prices. Land is abundant, and the day is far distant when food prices will be kept high on account of land scarcity. Until that day does come our farm practice will not be changed so that we shall plan for maximum production regardless of increase in labor bills.

Again, the sections of this country that are retaining their soil-fertility most surely are the natural grasslands. When the blue-grass comes in naturally, making a heavy sod that the farmer is slow to plow, the soil is being preserved. We have vast areas in which the plow is used too freely. This is true of most hilly regions. It is well that the day is far distant when pasturing will be abandoned by the masses.

About the only successes with an exclusive soiling system are found among dairymen. When a man has unusual skill in the selection of cows and the production of high-grade milk or butter that commands a high price, he may find that it pays even on relatively cheap land to provide the choicest feed in the mangers for his cows the entire year, not sending them out in the heat or amidst flies to gather any of their food. There are numerous instances of this sort, but the amount of land that may be so employed is relatively a trifle when compared with the area in this country that should be kept covered with pasture-grasses, where farm-animals will harvest their feed for themselves during six or eight months of the year without the intervention of high-priced labor.

SUPPLEMENTARY CROPS.—The discussion of the soiling system has done good chiefly in calling attention to the practice of growing some crops to supplement the pasture during August and September, when most pasture-grasses are not doing well. Probably nineteen out of every twenty stockmen and farmers should have pasture-fields. Most live stock in this country will continue to gather their own food in the summer, but there is need of soiling crops on most farms to stop the loss that is so often experienced from short pasturage. We need them to supplement the grass when heat and drought checks growth.

CORN STILL IS KING.—The new forage crops are numerous, and they receive much attention. Some are valuable, either because they are early, or because they are rich in protein, or because they thrive in dry weather, but in the corn belt we probably have nothing superior to corn for a supplementary crop in late summer and fall. It is too late for sole dependence, not reaching full feeding value until near maturity, but it gives a great volume of good feed in its season.

THE LEGUMES.—Canada peas, with oats in the North and cow-peas further south, are numbered among our valuable crops for summer feeding. The former should be planted very early, and as a rule are not satisfactory south of the fortieth parallel of latitude. Cow-peas need heat, being a southern bean. They are planted after cold spring rains are past, usually after corn-planting. Alfalfa is a valuable crop wherever it does well, and we are finding that it can be grown on a variety of soils. Another valuable supplement to pastures is sorghum. It stands drought better than corn, and the large volume of feed obtained to the acre is nutritious and palatable.

OVERSTOCKING BLUE-GRASS.—There is always temptation to put too much stock on a blue-grass pasture. This grass starts early in the spring, and makes a rapid growth of wonderfully nutritious feed; but it reaches maturity early in the summer, and then there is not much growth until fall rains come. During the first six weeks of pasturage a field of blue-grass can keep two or three times as many animals as it can support through the season. Experienced men do not stock heavily, but let much of the grass ripen. It remains good, and is eaten later in the season. Where land is cheap and labor is scarce, it is profitable to leave some pasture ungrazed until midsummer, and to have it for use in place of a soiling crop that would be more costly or difficult to provide. But it is beyond question that ample provision of some sort should be made for our animals when so much loss may occur from scant pasturage, and there should be increase in planting of soiling crops for this purpose.

CLOVER FAILURES.—The ability to keep much land in a state of profitable production rests largely upon the legumes, of which clover is chief. Without the clovers our producing power as an agricultural country would be far less than it now is. I do not say that we need to be so dependent upon clover—there are substitutes that might be used far more largely than they now are—but practically we are dependent upon the clover, because when it fails very many farmers turn to no other legume, and fertility decreases. It is also true that the ability to grow good clover is being lost at an alarming rate. There are great sections in which farmers are ceasing to sow the seed because past failures to get stands of clover have discouraged them. The causes of failure are many. One of them is just beginning to get consideration. The series of experiments that Director Thorne of the Ohio Experiment Station has been conducting to learn the effects of commercial fertilizers on the soil has given him evidence that the use of acid phosphates on some kinds of soil render them unfriendly to clover. Such data are of great importance, and concern us most directly.

The scientists have assured us that there is no danger in the use of an acidulated fertilizer when we need soluble phosphoric acid, but they did not know. There are, however, probably two facts to be borne in mind. One is that such a fertilizer could not make some soils acid, and therefore it may be that it would not have any tendency to render them unfriendly to clover. The soils referred to are strongly alkaline, and capable of neutralizing any acid in the fertilizer. But a big percentage of old soils tend toward an acid condition, and on these the heavy use of acid phosphates does not promote the growth of clover. The other fact is that land may be too sour to grow clover although it has never received a pound of any kind of commercial fertilizer. Much clover-failure is not attributable to the use of acid phosphates. It occurs where land shows acidity by the litmus-paper test, and one of many things may be the cause of that acidity. The point of interest is that we do not want to introduce a cause where none exists, and acid phosphates may be such a cause if a soil is slightly inclined to acidity anyway.

There is comparatively little commercial fertilizer that does not contain acid phosphate—plant-food from acidulated rock. Of course we have nitrogen and potash in their carriers (I am not referring to them), but the fertilizers usually sold to farmers commonly have the rock goods in them. The supply of true animal-bone is very limited, and some of it is mixed with rock, and some is treated with acid, as rock is, making acid fertilizer. We cannot get away from the necessity of using acid phosphates, because we must have phosphoric acid for the use of plants. It is the one element most deficient in ordinary land. It comes about, therefore, that more attention must be paid to neutralizing the soil-acid by the use of dressings of lime. The lime takes up some of the free acid in the soil that is harmful to clover, and thus favors the growth of the plant. There is a right way and a wrong way of using the lime, and the extent of clover-failure is so great, and the benefit of liming of acid soils is so pronounced, that I desire to urge farmers to experiment along this line. DAVID.

CLEARING A STONY FIELD

Caring for Manure

The care of manure should follow it from the stable to the field. Assuming that the animal has been fed a well-balanced ration, the manure will contain a fair percentage of nitrogen, that should be counted upon to reduce the original cost of the feed that carried the balancing element of protein to the ration. Whether this element has been bought in some of the by-products of the mills or grown on the home acres, it has been the most expensive one in the feed, and unless the full return of its residual value be secured in the manure, the wisdom of its addition to the ration may be questionable.

Hence, to save all of the value of the manure, it is very evident that all the manure must be saved. Even the smell of it about the stables should be saved, for the odor is produced by the gases being released and escaping into the air, and thus the nitrogen or ammonia is carried off and lost. There is an abundance of nitrogen in the air, so that we need not add any to it. We talk much of trapping it from the air by growing leguminous plants. This is a wise practice, and altogether good farming; but the same wisdom that draws upon the atmospheric nitrogen will be exerted, as I have said, in saving that excreted by our animals.

To save all the manure it is necessary to have water-tight stables, or manure-gutters behind the cows, and some absorbent material used to absorb all the liquids, and thus hold them until they are given up to the roots of the growing plants. Where the absorption is complete and rapid there will be but little waste of gaseous elements into the atmosphere, but where the only absorbent is long straw or uncut corn-stalks there should be a more active absorbent employed. There are a number of good agents that may be used as absorbents and to arrest escaping value, such as sawdust, shavings, road-dust, dried muck, land-plaster and acid phosphate. I use the latter, as I regard it as almost as cheap in first cost as the others, and as a fertilizer worth its cost, so that when I have added a ton of the phosphate to my manure-supply I know that I have not only saved much of the original value of the manure, but at the same time added the value of the phosphate.

Farmers often make the mistake of supposing that by mixing large quantities of straw with manure they have improved the manurial value of the straw, and that by allowing the mixture to ferment and rot they have a better fertilizing material. They have a more active or a more readily available one, but unless the decaying and mixing has been done with the greatest care, an essential loss is inevitable. The decay has changed elements, the change of which may or may not have increased their availability, but cannot have added anything to their original value.

Saving and absorbing all the excrement in the stable is not enough. If not hauled directly to the land, it must be guarded from waste by heating, atmospheric absorption and by rain. I recently saw a fairly well-appointed stable, with cement floors, on which all the excrements were saved, but the saved material was then thrown out of openings back of the animals and allowed to accumulate in piles under the eaves of the barn, and from there scattered by the rooting of pigs and tramping down by the other animals.

In another state I lately saw a herd of good cows that were going into winter quarters in bad condition. Their owner complained of short crops, not enough feed, etc., yet around his barns and yards was an accumulation of wasted manure, some of it, I was sure, as old as some of his mature cows.

Much is being written about animal husbandry as the rational means of maintaining the fertility of our lands, but I say unto you that every blade the land produces may be consumed on it by animals, and the land go into starvation if the manure be not saved and intelligently applied. And the cow is not a manure-spreader.

W. F. MCSPARRAN.

Alfalfa in the East

Alfalfa is essentially a plant adapted to the semi-arid West, and to land where the soil is deep. Its growth in the East presents difficulties not easy to overcome. Yet there are such reasons, based on its nourishing qualities as a forage crop, and the tonnage that can be grown in favorable localities, that experiments are in progress to determine if it cannot be made a commercial success. In New York State in particular the experiment stations have the subject in hand, and this year will have test-plots sown in various sections of the state.

Alfalfa as a crop can be compared to red clover. In eastern Colorado, where it has its best development, three crops a year are cut, and a yield of five tons an acre is common. The seed is sown usually on land which has been cropped several years. Crops can be cut from the one seeding for ten or twelve years.

It is grown under irrigation, but will thrive on less water than any other crop grown in the semi-arid regions. This is due mainly to the great depth to which the roots penetrate.

Deep soils are best adapted to alfalfa. It reaches its best in Colorado on sandy loam creek-bottoms and rich alluvial soils. Alfalfa blossoms early in June, and is ready to cut immediately after. A difficulty in curing will be found in a country of great rainfall. The second crop begins growth before the first is removed from the ground, and if a rainfall occurs in the interim, often causes trouble by its rapid growth. The second crop is cut about five or six weeks later, and is often as heavy as the first—from one to two tons an acre. The third crop starts at once, and yields about one half as large as either of the other two, but not as good in quality. A. N. LOOMIS.

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Gardening

By T. GREINER

DELICIOUS SQUASHES.—In recent years I have had quite a great deal of fault to find with the quality of the old Hubbard squash. Instead of being dry and meaty, as I used to have it, mine are now mostly stringy, watery, pumpkin-like. To get something better, I planted some Delicious last season, but lost the plants by accident or insects. My good friend Mr. Crawford, of Ohio, now tells me that this new squash is quite correctly named, and that it is as delicious as it seems possible for a squash to be.

CHILD'S GARDENING.—Our little eight-year-old boy has had a little garden of his own for at least two seasons. It is only a few square yards of land (good soil, of course), but he has kept it well occupied, well taken care of, with nice straight rows. At Prizetaker-setting time he asked for plants, and got and set them, and succeeded in getting just as good bulbs as I had in the regular patch. I believe that early training of this sort will make him a skilled gardener some day, and I shall try to nurse his interest and enthusiasm by getting him in the way of getting results of which he can feel proud all by his own efforts and in accordance with his own ideas.

GINSENG AND MUSHROOMS.—Mushrooms are notoriously a quick-growing crop, and under some conditions quite profitable. The extreme of tardiness in reaching results, for a vegetable crop, is ginseng. Both crops, however, are very similar in one respect—the great majority of people who undertake to grow them will never see the hundredth part of the profits that were promised to them by certain sellers of ginseng seed and plants or mushroom-spawn. You may stumble upon success in mushroom-growing once, and then again, using the same care and skill, meet with failure after failure. The people who tell you that with very little outlay and trouble you "can earn over one thousand dollars a year during your leisure hours" by growing mushrooms are competent to give lessons to the champion liar.

PROMISING NEW FRUITS.—A number of new fruits are spoken of in the report of the committee on new fruits presented to the New York State Fruit-growers' Association at the Geneva meeting. Among them are the following: The Regal grape, color red, with lilac bloom; season October, with Lindley, its parent; vine vigorous, apparently prolific; bunches medium, very long, beautiful, and berries closely clustered; quality fair, not best; well spoken of by Prof. W. J. Green, of Ohio, and S. A. Beach, of Geneva, N. Y., as a promising red market grape; W. A. Woodward, of Illinois, originated it in 1879; claimed to be entirely hardy and remarkably free from disease.

STRAWBERRIES.—The Pan-American has been mentioned by me repeatedly in these columns. It surely possesses a settled fall-blooming and fall-fruiting habit, and is a decided novelty. Whether it possesses great general practical value is another question. Mr. Taylor of the New York State station, while admitting that there is a limited demand for fresh strawberries in the fall, when they bring forty cents to one dollar a quart at retail, believes that with free offerings the price would soon come down to ordinary figures, as the popular taste at that time runs to peaches, pears, plums, etc. The Pan-American gives a moderate crop of berries in the fall, these being medium in size, medium in appearance and medium in quality. The difficulty seems to be to get the plants. The plant seems to be extremely shy in making runners, and to lack in constitutional vigor besides. In regard to the Ryckman strawberry, the originator, G. E. Ryckman, writes that the variety was first shown at the Pan-American Exposition in 1901. A patch of about half an acre produced that year three thousand seven hundred quarts, and this without rain from the time they were in blossom until the fruit commenced to ripen. The berries were reported to have sold at an advance of two to three cents a quart above market quotations. To what extent these results were attributable to high culture or to the inherent goodness of the variety I have up to the present time been unable to learn.

NEW CURRANTS.—The Perfection was awarded the Barry medal, which was offered by the Western New York Horticultural Society for the most promising new fruit. I saw it in fruiting on the grounds of the station at Geneva a year or two ago, and there it seemed to resemble the Wilder in some respects, but being somewhat earlier, having the same long cluster, long stem and large berries, seeds apparently small and few in number. I have no fault to find with the Wilder, which is one of the grandest of our red currants, of vigorous growth, prolific, berries large, clusters very long and long stemmed. The Chautauqua climbing currant, to judge from the one specimen on my grounds, has no climbing habit proper, any more than any kind of currant that is grown with single stem. Of vigorous and somewhat spreading growth, it might be trained to trellis or wall. The clusters seem to be large, with long stem, and berries of largest size. It is claimed to be hardy (more so than Fay), productive and of fine quality, having less acidity and fewer seeds than many others. The fruit has been kept on the vines in good condition for six or more weeks, after having ripened.

NEW RASPBERRIES.—Haymaker is a berry of the Columbian (Shaffer) type, apparently of equal vigor with the Columbian in growth, and ripening its fruit just when the other gets done with its crop, and promises to be a profitable berry. Black Diamond and Cumberland seem at the head of the blackcaps of recent introduction. The Herbert originated in Ottawa, Canada, and plants set in the spring of 1903 have made a good growth. Foliage remarkably strong and healthy; fruit large, of a bright red, and apparently firm enough to make it desirable as a shipper; quality excellent.

NEW SWEET CHERRIES.—Dykeman and Mercer are mentioned by Mr. F. E. Rupert as two of the newer cherries of considerable promise.

A NEW PEACH.—Mr. Hale names Hiley, a peach of the North China type, which was awarded the Wilder medal for best new fruit by the American Pomological Society, as a very promising early freestone peach, of good quality, and remarkably hardy in bud.

Fruit-Growing

By S. B. GREEN

SCURFY SCALE.—M. E. R., Nottingham, Pa. Scurfy scale is seldom very injurious to young trees. However, trees do much better if they are not infested with them, and you can get rid of them quite easily by spraying the trees with common whitewash, the result of which is, generally, that the scale peels off with the lime. I rather think you had better send me a sample of the diseased wood, so that I may determine for myself whether it is scurfy scale, as possibly it is some other kind. However, if you are sure it is not necessary to do so.

PEACH-LEAF CURL AND PLUM-POCKETS—These troubles are caused by the same fungus ("Exoascus deformans"), the spores of which probably winter over on or about the buds. The fungus does not live for a long time in the branches, as was at one time supposed. The best work on this subject has been done by Prof. Newton B. Pierce, of California, and his experience has shown, and the experience of others since has shown conclusively, that peach-curl may be entirely prevented by spraying the trees late in the winter, or early in the spring before the leaves appear, with a solution of sulphate of copper, at the rate of one pound to twenty-five gallons of water, or by spraying with thick Bordeaux mixture at least three weeks before the buds open. Where peach-trees have been thus sprayed it has made fully as much difference in the appearance of the trees sprayed and unsprayed as could be obtained by the use of any of our fertilizers. Plum-pocket is especially troublesome in some sections, and is especially injurious in the case of our Americana plums, where it causes the fruit to puff up and become hollow. Professor Pierce told me some time ago that he felt absolutely certain that the same treatment that had been so successful with peach-curl would entirely prevent the plum-pocket.

CHERRY NOT BEARING.—H. W. O., Williamfield, Ill. It is hard to give the cause of cherry-trees not bearing fruit. Even if they are healthy and vigorous, apparently well located and of the proper variety, they will sometimes fail to fruit, and the reason is not clear to any one that I know of. On the other hand, they may fail to fruit by reason of the fact that they are in some low spot where the thermometer goes very low in winter, so that the fruit-buds are killed. This would be especially evident in moist soils where the growth was continued late in the autumn. In Minnesota, Iowa and Wisconsin it is quite common to have the fruit-buds on some of the hardiest cherries killed in winter, although the leaf-buds may be all right and the tree appear to be perfect in midsummer. It is possible, too, that you have some variety that is not productive or one that has flowers that are sterile to its own pollen and must be near some other variety. Mulching may be good or bad for cherry-trees, but as a rule it is not desirable. Cherry-trees do best on rather high, porous, open soils.

THE SHELLING OFF OF GRAPES.—The reason why grapes shell off from the stems before picking or afterward is not known. Some varieties seem to be much more susceptible than others, and in some locations and in some years it is much more troublesome than at other times. It has been thought by some of our best growers that it was due to lack of proper fertilization of the soil, but this seems to be hardly a clear case. There can be no question but that vines that are supplied with the proper amount and the proper kinds of food are healthier than those that lack for any one element, but I am inclined to think that this is a quality that is more constitutional in the vine, and is greatly modified by climatic conditions. Some varieties are especially liable to this trouble in my section, and among the worst are Moore's Early, but some years the Concord and Cottage shell badly. A neighbor of mine, however, has a vineyard in which the Moore's Early is scarcely affected by this trouble.

PICKING AND KEEPING LEMONS.—M. E. F., Tehama, Cal. If lemons are allowed to ripen on the tree they are thick skinned, corky, of poor quality, and will not keep. They should always be gathered just before they begin to turn, and be stored in well-ventilated rooms free from drafts. They should be cut from the trees, and handled with the greatest care. The thinning and toughening of the skin, which occurs in lemons that have been cut when green and stored, improves them for marketing, and seems to increase the juice. Some growers prefer to put their lemons in piles under the trees, where they will be shaded by the foliage; others prefer to store them in sheds, protecting them from drafts of air. In a small way the fruit can be kept in excellent marketable condition by picking while green and packing in alternate layers of dry sand. Of course the handling of so much sand entails quite a considerable amount of labor.

PLUM-INSECTS.—W. S. H., Seattle, Wash. I do not know what insect you refer to, and am quite positive that you have mixed up the injuries from several insects. The cause of the leaves curling up in knots, as you say, is probably the common plum-lice, which have been abundant all over the country the last two years. The eggs of this louse can be seen on the trees in winter, and if you had examined the twigs of your plum-trees last winter you probably would have found a large number of their small, black, shiny eggs stuck on the twigs around and between the buds. These eggs hatch quite early in the spring, and the young begin work on the opening leaves. In my experience the best treatment for destroying these has been to spray very early in the spring with strong tobacco-water. This should be made from tobacco-stems or other raw tobacco, and be used about the color of strong tea. Where they are neglected early in the spring, and the leaves curl up, it is almost impossible to reach them with any spraying-material. Under such conditions I have found it best to use tobacco-smoke, first covering the trees with a tent made especially for this purpose. The tobacco-smoke works perfectly. In using it a small fire should be started in a metal frame made for this purpose, and then damp tobacco-stems should be laid on it. These should never be allowed to blaze when under the tree. One treatment with tobacco-smoke absolutely destroys all the lice on the trees, and is the most effective treatment I have ever tried. This is a sucking insect, and applications of Paris green, hellebore or any similar poisons would be useless. I am inclined to think that the insect to which you refer as having a web is probably the tent-caterpillar, or else a canker-worm. For insects of this kind, that eat the leaves, Paris green is a good remedy, but care must be taken in applying it to plum-trees, as the foliage is quite liable to be burned. I think that you would probably find that Paris green at the rate of one pound to one hundred and fifty gallons of water is about the right proportion, but you should also add as much lime as you do Paris green, in order to counteract any free acid that may be present.

Poultry-Raising

By P. H. JACOBS

Eggs for Hatching

Do not be afraid to purchase eggs of pure-bred fowls on account of the fact that they may have to be shipped some distance. When eggs are packed properly they can be sent any distance, and will suffer no injury thereby. They have often been sent from the Atlantic Coast to California, and have hatched with good results. The same thing is true regarding the shipping of fowls. They may be sent any distance if cooped properly. Nevertheless, it is not advisable to ship them from the South to the North in the winter-time. If the breeder is careful when packing eggs, the buyer will receive them in very good order.

Failures to Hatch

When readers write to the Farm and Fireside regarding failures with incubators, it is proper for them to give all the details of management. The cause of chicks failing to come out of the shells after picking the eggs half around or more may be due to the sudden lowering of the temperature, to too much moisture, or to the heat being low during the period of hatching, as the thermometer may be incorrect. As a rule but little or no moisture should be used, and if none is given at all it may be an advantage. Again, the eggs may be at fault, being laid by fat hens. When chicks do not break the shells until the twenty-first day it indicates that the heat during incubation was rather low or too much moisture was used. As a rule the failures are due more to the eggs than the incubator.

The Details

With the poultryman it may happen that, with a bright prospect for success before him, some little oversight, or omission to attend to one or two details, will destroy all his anticipations. There is sometimes a sad lack of profit in handling chicks just because there is a sorry lack of management somewhere. The essentials are the countless little things which one cannot teach another, and these have more to do with results than general rules. The breed, the care, the warm shelter, the proper food, are all on the list, but only the practical man learns those which cannot well be written. The proper plan is to begin with a small flock, and gradually increase, so as to meet the details daily, learn to avoid mistakes, and to seize every advantage for reducing expenses and increasing profits.

Keeping Eggs for Hatching

If it is the desire to save eggs from one or two selected hens, pack the eggs in a manner so that they can be turned half over at least three times a week, though once a day is better. Many suggestions have been made as to the proper mode of preserving eggs; but no matter what the process may be, the only sure mode is to turn them. The yolk of an egg will settle to the side of the shell if it remains in one position; but if they are turned, provided they are kept in a cool place, no packing-material will be required. It requires a temperature of about fifteen degrees above zero to freeze an egg, as the egg is composed of a solution of "salts" and other matter; but when storing eggs for future use the temperature should be about forty degrees. Eggs will keep in an ordinary cold place at an even temperature—just below the freezing-point of water being suitable—but they should not be allowed to become frozen if it can be avoided. Changes of temperature will injure eggs as well as anything else, and they are also easily damaged by too much warmth.

An Excellent Disinfectant

One of the oldest, cheapest and best-known disinfectants and tonics for several diseases is Douglas mixture, which may be used in a number of ways. As it is composed of one pound of copperas, two gallons of water and one ounce of sulphuric acid (oil of vitriol), it makes an excellent disinfectant. An ounce of the acid is about a gill. A teaspoonful of the mixture is usually added to each quart of drinking-water, and it serves not only as a preventive of diseases, but is also sometimes an excellent remedy for roup and cholera; however, do not use the mixture in the drinking-water constantly, but only occasionally. It is also a tonic, providing iron in a soluble form, the copperas being sulphate of iron. When the birds are molting, or when they droop and seem debilitated, try the mixture, and it will often give them a new start in health. Being very cheap, it can be used by all. Sprinkle it freely over the floor of the hen-house, on the roosts, and even in the nests (in summer), and it will prevent lice, disinfect the buildings of odor, preserve the droppings, and prevent the spread of disease by destroying germs. In the drinking-water it is an excellent safeguard against the spread of roup, as the free acid instantly destroys all germs in the water. It is doubtful if any other mixture can be produced that combines so many advantages by its use, and as the two gallons can be made for about ten cents a gallon, the matter of cost is but a trifle. It is also safe and harmless if used as has been suggested, but it should be resorted to only as required.

Spring Hatching with Incubators

Those who are operating incubators should continue until well into spring, and should also endeavor to have as many chicks hatched before February as possible. Always begin with a small incubator, and to learn well the operator will make no mistake if he begins earlier, as any experience gained previous to the time for hatching out chicks for market will be found valuable. The summer season can be used for learning how to best operate and manage, but every one who has an incubator will find the early months the most suitable for securing the chicks that bring the highest prices.

Failures in Laying

Sometimes the hens will not give a profit even with the best management. They are subject to lice, molting and other drawbacks at all seasons. Occasionally, even in the winter season, one or two individuals may begin to molt. The discarding of the old feathers and growing the new ones is a severe tax on all kinds of fowls, and they seldom lay during the process, as they cannot produce eggs and feathers at the same time. When feeding fowls, in order to make them lay, use meat—either cheap portions, such as liver or chuck, or the commercial ground meat—allowing but little grain. Once a week a mess composed of one quart of bran, one quart of ground oats and half a pound of linseed-meal will be found beneficial. Never overfeed, and avoid feeding three times a day, allowing meals morning and night only. Warm quarters will induce laying in winter, especially if the food is rich in elements necessary for egg-production.

Crowding on the Roosts

Fowls that are crowded do not respond with a profit. It may pay to have a small flock, and yet the addition of a few more birds may change the profit to loss. Sometimes more fowls can be kept together in the poultry-house in the winter season than in the summer, and in fact on very cold nights it may be an advantage to have enough of them together so that the animal-heat of their bodies may raise the temperature of the house; yet they should not be crowded, or they will not thrive. During the warm season each hen should have at least ten square feet of room, but in winter five square feet may be sufficient. That is, a house ten by ten feet should accommodate ten fowls in the summer, but in the winter season such a house can be used to keep twenty hens with less inconvenience than to put ten of them together in summer. But very little yard-room is needed in winter, as there is nothing that the hens can then pick up; but the poultry-house should be light and made as comfortable as possible, as all kinds of poultry prefer light and cheerful quarters.

Inquiries Answered

Regulating Incubators.—M. P. E., Naples, N. Y., desires "complete details for operating and regulating incubators." Probably "The Revised Complete Poultry Book," published by the Farm and Fireside, will give full information regarding incubators and brooders.

Worms in Poultry.—Mrs. R. W., Toms River, N. J., asks for "a remedy for worms in chickens, and also for closing of the eyes." It is possible that the closing of the eyes is due to overhead draft. An excellent remedy for worms is a teaspoonful of sulphur and the same of spirits turpentine in a quart of meal fed once a day for two or three days.

Laying Hens—Swollen Eyes.—M. H., Whitepine, Tenn., inquires if "more feed will increase the number of eggs; also, a remedy for swollen eyes." Sometimes too much food is given. Food consisting of more meat and blood, with less grain, should increase the production of eggs. For the swollen eyes, close top ventilator, and anoint daily with camphorated oil.

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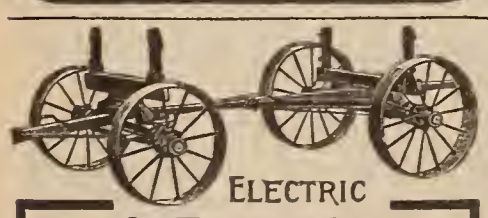

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Live Stock and Dairy

Care of Work-Horses in Winter

ON THE average farm half the working-teams are not required for actual service more than four months of the year. The rest may have work for five or six months, but for the remaining time one or two horses only will be needed. The cost of keeping a number of idle horses is a considerable item in the farming expenses. It may not be so burdensome in warm weather where pasturage is abundant, but during the winter attention and shelter must be given in addition to the regular feed, and this is the period when the greatest number of horses are idle. This state of affairs cannot be wholly remedied. At the present time as much of the farm work as possible is done by horse-power. To be successful, the farmer must be able to manipulate the various processes at the right time.

In the winter mature working-horses may be sustained by the less expensive feeds. They will eat with relish largely of the heat-producing elements. Corn stover secured in good form is a desirable feed, because its commercial value is less than its feeding value. It is a secondary product of the corn crop, and when the grain is secured the stover may be said to cost no more than the labor required to save it; yet to have the full value realized, the corn must be cut before the blades are bleached or blown away, and the stalks should be put under shelter after husking. If the stover is preserved in this way, horses will eat about as much of the edible portion as one could ask. Another forage crop well adapted to supplement the stover, and seldom sold for its real value, is clover hay, yet this crop also is one that is not often harvested in a manner calculated to realize its highest value. It should be underripe when cut, and I believe that it should be well cured before it is put into the mow. Horses will eat such hay in preference to corn. If at any time the hay is dusty when it is thrown from the mow, it should be moistened slightly by sprinkling several hours before feeding.

An economical method of feeding bright straw is to mix it with the clover hay. When fed together, the clover balances the straw, and no doubt the horse will do better than if he is fed either one singly. It must be observed that if the horse is to be wintered largely by these forage products they must be saved and kept in prime condition. So many fail because the feed is inferior and devoid of nutritive value; but if attention is given to these points very little grain will be needed to keep the horses in good flesh, and as the season of work approaches they can be given a larger ration of grain to fit them for the hard service in the field. Horses wintered in this way will pass through the idle period with less expense to the owners, and also respond to the grain diet better, than if kept on a diet of concentrated feeds continuously.

As a rule the horse worked continuously through the winter is the one which endures hard work in the spring. His shoulders do not gall, and his muscles remain firm. Hence the winter work should not be performed exclusively by one or two horses, but should be distributed among all of them. Horses should not be confined to the stable except in stormy weather. They should have the run of a lot, or better of a field, in freezing weather, but they should have access to a wind-break. It is very well for them to pick up a mouthful of clay occasionally, to keep them in tone. When on pasture they pull up and eat small particles of the soil with the grass, which seems to be beneficial to them. Observation seems to indicate that the horses confined to stable except when working are more susceptible to disorders than those which are turned out in the daytime. Salt should be given regularly, but horses which have been idle and are subjected to a hard day's work now and then will be less liable to an attack of indigestion if they are salted more freely at those times. Giving such horses large drafts of cold water when they are in a heated condition should be carefully avoided. ROBERT. L. DEAN.

When the Cow Begins to Give Milk

Every year we hear more or less complaint of losses of cows through milk-fever. A good many times these losses are hard to bear, especially where the owner is a poor man. A neighbor of mine, who kept only four or five cows, lost the best one through this dread disease. The little dairy had been carefully wintered through to the time when the farmer would begin to get some return for his feed and labor all winter long. The cow was in fine flesh, showing good care on the part of the owner, and it did seem a sore misfortune that he should be compelled to part with her now. But such losses are always hard to bear.

A good many have studied on means of prevention of this disease, and still the losses go on. Not all of us are so situated that we can procure the services of a veterinary surgeon, being remote from town or city. What, then, shall we do?

This is the way I have met the danger of milk-fever: In the first place, I believe the difficulty is most apt to attack cows that are in full habits, have been fed well, and are in perhaps too good flesh to withstand any disease. The cow which has been long confined in the stable, with little exercise, is much like a person that has been shut up in the house all winter, eating full rations and taking little outdoor air and exercise. Realizing this, it has seemed to me best to discontinue heavy feeding at least three weeks before the cow is due to begin giving milk. In the place of corn it has been my practice to give a liberal ration of wheat bran once a day until the crisis is past. The effect of this feed on the system of the cow is decidedly beneficial. It acts as a mild laxative, keeping the bowels regular, and so preparing the cow for the critical period that is approaching.

Watching the cow carefully, a day or two before her sickness I give her a good dose of Epsom salts, still further cooling the system and promoting the general health. Thus, to a large degree I forestall the danger of any fever.

After the sickness is over I continue to watch the cow and arrange her diet so that she may not take cold or become clogged by overeating. There is a tendency with a cow that has been thus confined to eat more than she should. Her appetite is sharp, and she has a marked thirst. Here is a decided danger-point. Many cows have lost their lives by being permitted to drink all the cold water they will after the birth of the calf. That was the case with the neighbor to whom I above referred. The cow was permitted to go down to a stream of running water and drink all she would. In a very few hours she was dangerously sick. Two days later she was dead.

No cow should be allowed to drink heartily for a day or two after confinement, and never at that time of ice-cold water. I do not mean that she shall be kept without drink; but I do mean that all the water given her shall have the chill taken off before she is permitted to drink it. One pailful at a time of this cool water is enough, but she may have that amount several times a day.

No heavy feed should be given the cow until she has fully regained her strength. Keep up the ration of wheat bran. Nothing is better than this. I always give a four-quart measure of bran, made into a mash by the addition of warm water, as soon as practicable after the birth of the calf. Many good farmers give instead of the bran an equal quantity of dry oats. Thus they avoid the danger of retention of the placenta. Three days after the cow's sickness she may be given a small ration of corn-meal with the bran. The ration may be gradually increased by this time, and inside of a week she may be back on her usual feed, all danger being over. E. L. VINCENT.

The Choice of Three Good Breeds

"Will you kindly answer through the 'Sheep Breeder' the following questions: Which of the three breeds of sheep—the Oxford, Shropshire and Dorset—would you advise a new beginner to start with as the best money-maker? I mean to raise lambs, mutton and wool. I have been thinking of investing in a few Dorsets, but am afraid they are not all that is claimed for them."

ELMER TURLEY, Logan County, Ill.

Generally speaking, it is a safe proposition that the new beginner with sheep will do best with the breed he likes most, and as Mr. Turley evidently favors the Dorset, it is probably best that he should give that breed a trial. The Dorset is a prolific sheep, a great milker and a splendid mother, and the Dorset lamb is a quick and sturdy grower. Not all Dorset ewes will breed twice a year and raise two sets of lambs within the year, but the tendency of the Dorset ewe to take the ram at almost any month in the year is so strong that with care in feeding and handling it is not difficult to breed most of the ewes for September and October lambs. It is no advantage, however, to crowd a ewe into the raising

5 + 1 = 6

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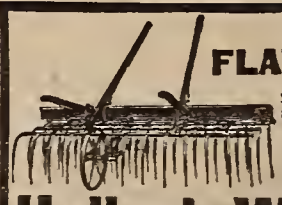

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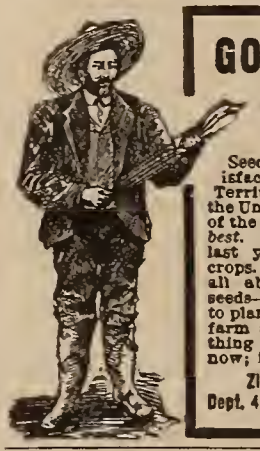

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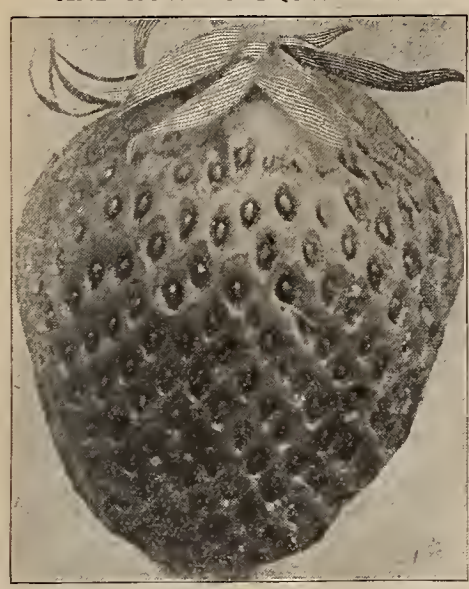
AND HOW TO GROW THEM



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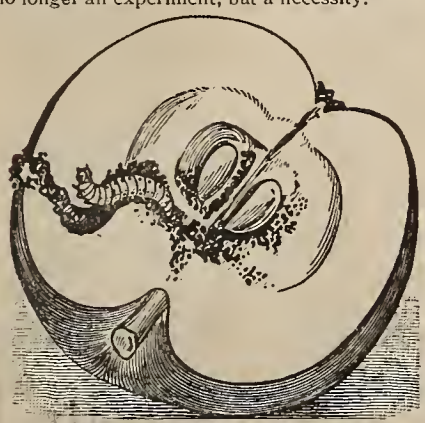
The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an experiment, but a necessity.



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of two sets of lambs within twelve months simply because the thing can be done. Most Dorset ewes that are well kept bear twins, and the raising of two pairs of twins a year will break down the strongest ewe that ever lived in two seasons, and leave her a physical wreck when she should be just in her prime. As an early lamb-raiser the Dorset leads either the Oxford or Shropshire, but is no match for them either in size or weight of fleece. Either of these larger Down breeds is good for one hundred and twenty-five to one hundred and fifty per cent of lambs, and that is better both for lambs and ewes than a greater percentage. The best breeder of sheep will prefer one good lamb to two not so good.—Editor American Sheep Breeder.

PAIR OF CHESTNUT STALLIONS AT THE MISSOURI STATE FAIR

Western Horse-Breeding

While attending a number of county fairs in Missouri last fall I had many good opportunities of noting the lively interest manifested by the farmers in the breeding and training of good horses. I being an Eastern man, and living in a section that is probably the most extensive rural customer for Western horses of all in the East, was especially interested in studying the breeding and training methods of our friends who are producing the horses we are using. They fully realize the value of good blood in pedigree, and insist upon good individuality in the producing animals.

There is no more attractive feature of the local fair than the showing and judging of horses. The showing is done with all the skill, and sometimes some of the tricks, of the accomplished horseman. The judging is done honestly and deliberately, and the judges must be men who know horses.

While there are liberal representatives of the shires and Percherons, the horses that are light and active enough for good riding and driving, and at the same time heavy enough to do good service in the team or on the farm, are most in favor. The day of the pretty little horse has passed. He was too ornamental to be really useful, and in his place has come the heavier but sufficiently active animal that even in the carriage of the magnate or the turnout of "my lady" suggests the reserve force and dignity of power and wealth. Then, we farmers who buy horses and drive them and work them want a weight and energy that will "yank" the plow or mower or harrow and make a stylish and fast enough team when we take a spinning drive.

So the boys out in the wider country are breeding and breaking the horses we are calling for, and we are paying them prices that seem to be satisfactory to the parties of the first part.

A MISSOURI RIDING-MARE AND HER TRAINER

The accompanying illustrations show some of these horses caught by my camera at a Missouri fair. The riding-mare mounted by her trainer was a magnificent animal, and was trained to do "everything but talk"—and her inability to do that may have emphasized her intelligence. Horse sense often keeps itself wise by keeping quiet.

The pair of the picture were fine chestnut stallions as they came from winning a blue ribbon. W. F. McSparran.

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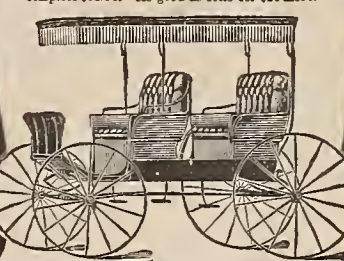

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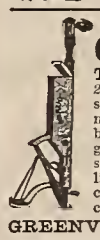

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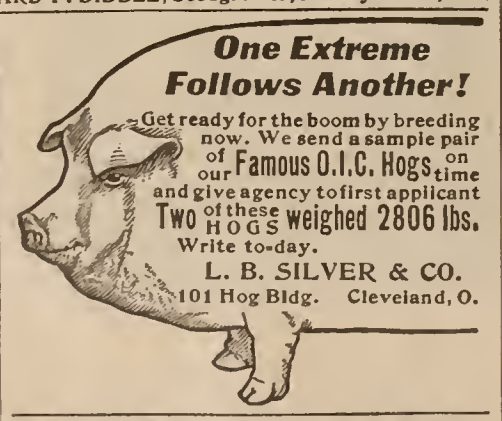
Most complete line made. 1903-4 Patterns Steel Lever Stock Scales are beauties. Prefer man experienced in selling machinery and implements. Fine catalogue. No samples. Can be handled nicely as side line. Liberal contract. Exclusive agency. Have you that man in mind? Show him this paper. He can make money. We want him now. Act quick.

OSGOOD SCALE CO., 75 Central St., Binghamton, N. Y.
Largest makers of Farm Scales in this country.



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Two of these HOGS weighed 2806 lbs.

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and boys in every city and town, who are bright and energetic, and who want to make some money for themselves, or who would like to have a *steady income*. It is the most pleasant work possible, and will bring you in contact with the finest people. The work can be done after school. Write us at once. Address Circulation Department,

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The Grange

By MRS. MARY E. LEE

Ohio Farmers' Conventions

THE various conventions of farmers held in Columbus, Ohio, January 12th-15th drew the largest audiences, and were the best from every point of view, of any ever held. At the State Farmers' Institute every speaker was present with a good address. The discussions were animated and to the point, and President Housekeeper had to call several times for the close of discussions, so eager were the audience to inquire. "It is the best farmers' institute I ever attended" was the universal comment, both of Ohioans and our guests.

The State Board of Agriculture also held sessions of deep interest, where business was transacted promptly and satisfactorily, and papers of unusual merit presented. Messrs. Lybarger and Bailey were elected members of the State Board of Agriculture. They will grace the position to which their fellow-workers elected them. Quite a bit of oratory was let loose in the nominating speeches, and the rivalry was pleasant in the extreme. But one incident occurred to mar the interest of the meeting. Governor Bachelder of New Hampshire was absent. He got as far as Cleveland, and owing to the stupidity of a porter was put on a train bound for St. Louis instead of for Columbus. Even railway-porters confused the significance of the St. Louis and Columbus conventions.

The various breeders' associations held interesting meetings in the evenings.

The Ohio Agricultural Students' Union convened at Townshend Hall January 15th. The entire day was given over to a discussion of the corn-plant from a scientific standpoint. This was one of the most valuable meetings of the series. Members of O. S. U. faculty, alumni, students, bankers, editors and practical farmers crowded the audience-room. The Students' Union is doing great work for Ohio farmers—how great they cannot realize until they come in personal contact with the work and workers. In the evening a banquet was held, with Prof. A. D. Selby as the efficient toastmaster and Hon. F. A. Derthick the guest of honor.

Governor Herrick's Address

Governor Herrick's address showed that he is in hearty sympathy with agriculture, and the farmers expressed appreciation of, and confidence in, his attitude. He began by identifying himself with agriculture. He regretted that agriculture had not kept pace with other industries along advanced lines, and urged better technical training, not only as a business proposition, but to make farm life so attractive that the boys and girls will want to engage in it as a profession. "Our splendid agricultural college is now affording to the farmer the same special and technical training of which other callings have the advantage." Old methods will not win in any field of activity, much less in farming.

Farmers are inclined, to complain of the trusts, and measure their success disadvantageously to themselves. But the farmers' interests were not seriously affected by market fluctuations. "The annual income of the farmer," said he, "would buy out every trust and syndicate in the land, all the manufactories, national banks and every other interest, pay the national debt, and have left five hundred million dollars." The general trend of what was said by all to be the best address yet made by any governor was insistence upon technical training, and commendation of the splendid work being done by the Ohio State Agricultural College, the Experiment Station and the Board of Agriculture.

Importance of State Institutes

"Yes, it's a very fine-looking assembly," said Prof. John Hamilton, of the United States Department of Agriculture, Washington, D. C., "but the house ought to have been packed. Ohio's standing as an agricultural state demands that she send more of her sons to this annual meeting. I listened with great interest to the discussions to-day, and they were of too much value to be listened to by so small a crowd. Instead of hundreds there ought to be thousands at these meetings. Never was there as great advantages for agriculture everywhere. In the East, the West, the North, the South, men are turning their attention to farming as one of the most lucrative businesses. Last summer down in eastern Tennessee a great institute for the eastern quarter was held. Twelve hundred farmers came up, stayed nearly a week, paid their own expenses, and were sorry to go away. South Carolina came to the state college two thousand strong, stayed nearly a week at their own expense, and were loth to go home. Alabama sent fifteen hundred to her institute, who stayed nearly a week, and left reluctantly. These were the best men of the South—the very bone and sinew. Intelligent, eager, zealous, all came inquiring for better methods and better ways of living. Ah, you people of Ohio and the North must waken to your opportunities or be outstripped in the race! Urge the farmers to attend these state meetings. They cannot afford to miss them."

W. W. Miller

"Mr. Miller should be given special commendation for this splendid institute," said one of the most prominent workers. "He is an organizer. He is possessed of rare executive ability, as this institute goes to prove." A hearty "amen" to that sentiment. Mr. Miller has placed Ohio in the front rank, so far as state fairs and institutes are concerned. To his masterly constructive genius and executive ability the farmers of Ohio and the nation are deeply indebted. While he conducts his department with the utmost economy, he insists upon maintaining the dignity of the greatest industry in Ohio. Consequently, the farmers of Ohio may rest assured that their department is lodged in the most spacious and sumptuous apartments of the State House. It took grace, grit and gumption to secure this above rival interests; but Mr. Miller insisted upon the dignity and worth of agriculture in Ohio, and scored his point, to the satisfaction of every farmer who takes a pride in his business. I mingle with farmers all over the state, and I have the first criticism to hear of his work. All are unanimous in praise of his most splendid achievements. Farmers cannot afford to lose him from his present position save for one other—the highest office in the state. Let us always remember that Ohio is first of all an agricultural state.

Reminiscences

"I can remember when a dozen men were huddled together in an obscure corner for the State Farmers' Institute," said Prof. C. E. Thorne, director of the Ohio Experiment Station. "The meetings gradually grew in interest and attendance. Occasionally the programs were not of sufficient interest to attract farmers, and the farmers were not aroused to the importance of the meeting. The sessions this year are the best ever held, and this room and the galleries should be packed. Farmers cannot afford to miss these annual gatherings. The papers and discussions have been good without exception. Urge upon your readers the necessity of coming to these annual convocations. They cannot afford to miss them. The growth in attendance is gratifying, and next year instead of three hundred or four hundred there ought to be over a thousand."

The Observatory

About eighty granges in Ohio have availed themselves of the traveling library. Five times that number ought to be getting the books.

"I never before realized what a powerful organization the grange is," exclaimed Mrs. Bates, of Indiana. "I am going to affiliate with it at once."

"Impress upon the youths the splendid opportunities scientific agriculture opens up to them" was the slogan of the leaders in agriculture at recent meetings.

The paper on "Corn Feeding," by L. H. Goddard, and the discussions thereon, are fruitful topics for many discussions in grange halls before corn-planting season.

The executive committee of Ohio State Grange ordered five thousand copies of State Master Derthick's excellent address printed for deputies' distribution.

Professor Graham, of Springfield, Ohio, and Professor Kern, of Winnebago County, Illinois, are pioneers in the school-garden field in America. Their success has been most gratifying.

Prof. A. D. Selby of the experiment station delivered an epoch-marking paper on "Soil Problems" at the State Institute. It would have paid any farmer to have spent time and money for the four days to have heard it. Watch the agricultural press for a résumé of the article.

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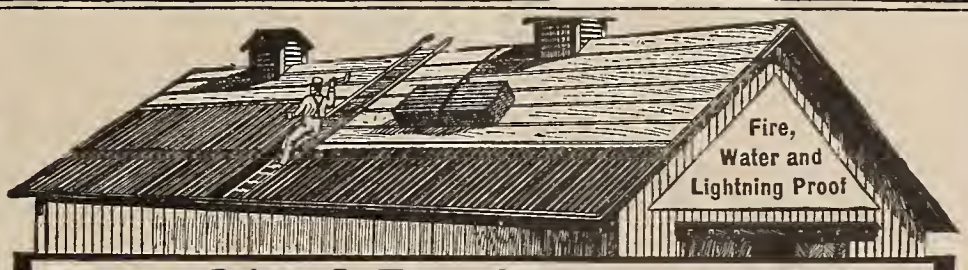

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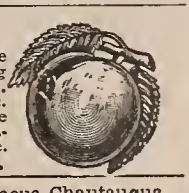

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Around the Fireside

Negro Diplomacy

THE shrill call of "Gawge Washin'ton! Oh, Gawge Washin'ton-n!" was heard. Aunt Gooley Lewis looked out across the bare, gravelly stretch of land lying between her one-room cabin and a clump of trees three hundred yards away, and there was something in her look that boded no good for the namesake of the Father of His Country. Again she sent her shrill voice across the sunburnt plain. "Gawge Washin'ton! Gawge Washin'ton Lewis-s-s!"

"Mom!"

A chocolate-colored piccaninny started up from behind the woodpile beside the cabin with a suddenness and nearness that made Aunt Gooley start.

"Gawge Washin'ton, why doesn't yo' answer me when I calls yo'?"

"I didn't heah yo' de two fust times yo' called, mammy. I answered jist as soon as I heerd yo'."

"Mighty strange yo' knowed I called yo' two times, den. Gawge Washin'ton Lewis, whah am dem two pails o' watah I sont yo' foh more'n an hour ago? Yo'se been asleep ag'in, I'll be boun'. Gawge Washin'ton, Ise done completely mystified wid yo'. I'se done prayed wid yo', an' whaled yo', an' tried to fotch yo' up in de broad an' narrer path, an' bless Gawd, yo' gits onrier and triflin'er an' sleepier ebery day o' yer life! Yo'll break yo' ole mammy's hea't yit wid yer laziness an' no-countness. An' ole Mis' Bakah done told me yistiday dat dey's boun' to disfranchime all de no-count niggahs in Figinia. Does yo' want to be disfranchimed, Gawge Washin'ton? Tell me, chile."

"Don't keer if I is disfranchimed. 'Tain't gwine to hu't me."

"Huh! Don't keer if yo' is disfranchimed, does yo'? Don' keer if yo' is disfranchimed an' sont outen de country —sont to Afriky, to be et up by cannabulls. Don'—"

"I don't want to be et up by cannon-bulls! I goes to de meetin', an' says my pra'rs ebery night!"

"Huh! Yo' needn't t'ink dat gwine to sabe yo'. If ole Kunnel Bakah done say dat you'se got to be disfranchimed, yo'se got to be, dat's all dar is to it. Pra'rs ain't gwine to do no good wid him."

"Boo-hoo! I don't want to be et up—boo-hoo!—by cannon-bulls—boo-hoo!"

"Well, if yo' totes watah right good fo' me mebbe I can 'suade him to let yo' off."

"Gawge Washin'ton," fully persuaded of the superior efficacy of "toting" water, found his buckets, and started for the clump of trees, while Aunt Gooley, conscious of another victory, went back into the cabin to rest.—C. E. Armentrout.

Interesting Facts

More than one hundred and fifty books on the war in South Africa have been published.

The weight of the average baby's brain at birth is a little more than three fourths of a pound.

An electric pickpocket-alarm has been invented by a man in Manchester, England.

British railway capital has increased during the last ten years by no less than eight hundred million dollars.

An anonymous donor has given three hundred thousand pounds to St. Bartholomew's Hospital, London, to buy the land required for extension.

To such an extent does religion prevail at Gonoatoa, in the South Seas, that every man, woman and child on that island who does not go to church at least three times a week is liable to be arrested and fined.

Breaking the Ice

We had some offish neighbors once that moved in down the road.
We reckoned they was 'bout the proudest folks we'd ever knowed.
An' when we passed 'em now an' then we held our heads up high
To make dead sure they couldn't snub us if they was to try.
It really made me nervous, so I jes' braced up one day
An' thought I'd go ahead an' show my manners, anyway.
On Sunday, 'stid o' turnin' 'round an' gazin' at the view,
I looked at them, an' says, "Hello!" An' they says, "Howdy do!"

It wa'n't the cold an' formal greetin' that you've sometimes heard;
They smiled an' said it hearty, like they meant it, every word.
It's solemn to reflect on what we miss along life's way
By not jes' bein' natural an' good-humored day by day.
There's lots o' folks who fling the simple joys of life aside
Because they dread the shadow of their own unconscious pride.
An' nine times out o' ten you'll find the rule works right an' true—
Jes' tell the world "Hello!" an' it'll answer "Howdy do!"

—Washington Star.

Doolittle's Trained Hens

"Well, boys, what d'ye s'pose Pete Doolittle has been up to now?" demanded Job Blinkers, as he dropped into his accustomed seat and filled up the circle around the post-office stove, now utilized chiefly as a rest for the feet.

"I dunno; but I'll bet it ain't anything in the line of work—not if Pete attended to it hisself," spoke up one of the crowd.

"Guess you're right about that," rejoined Blinkers. "Doolittle never was very fond of work. And this new dodge

he's been up to lately is just what one might expect from a man of that kind. He has a good-sized huckleberry-patch, you know, and I'm dinged if Doolittle hasn't trained his hens to pick the berries. Any one would natcherly s'pose they'd gulp the berries down while pickin' them, but they don't. Doolittle has got that part of it fixed all right.

"Now, how d'ye s'pose he manages it? Why, he simply puts a rubber band around their necks just tight enough to prevent them from swallowin' the huckleberries, an' yet not tight enough to hurt them. Then he has a sort of contrivance like an old-fashioned goose-yoke hung to the neck of each hen, an' fastened to the lower end of each yoke is a light wooden pail to hold the berries. Doolittle's huckleberries are of the low-bush variety, an' the hens have no trouble at all in reachin' the berries.

"I was over to his place for an hour or so tother day watchin' the hens work, an' it was a sight calkilated to do a lazy man a heap of good. Doolittle seemed to be enjoyin' it fust-rate—fer him. There he was, perched upon the fence, smokin' his pipe an' takin' things easy, while the hens were bucklin' right down to business an' snatchin' the berries off the bushes just as if they expected to get paid fer it. They seemed to know the ripe berries from the green ones, too. Anyhow, I didn't see them pick any green ones, except once in a while a hen would get hold of one by mistake, and then she would drop it on the ground instead of into the pail, an' go on workin' as if nothing had happened.

"As fast as the hens got their pails filled they would come over to the spot where Doolittle was settin', an' cluck, to let him know they were ready to be unloaded; an' then he would get down from the fence an' empty the berries out into a big basket, an' start the hens off to pickin' ag'in. I told Doolittle his plan fer gatherin' the huckleberry crop was the best I'd ever run across yet, an' he sighed kinder tired-like, an' said:

"'Yes, it is purty slick, but there's one drawback to it.'

"'What's that?' says I.

"'Why, ye see, I've got to climb down off the fence every fifteen minutes or so to empty the pails, an' I tell you it's wearin' on the constitution to keep it up all day. Now, if the hens knew how to turn a summerset, same as them limber-j'inted chaps in a circus, I'd be all right. Then all I'd have to do would be to have a good-sized box standin' in a handy place to empty the berries in, an' the end of a plank a-restin' on one side of it, with the other end a-restin' on the ground, so the hens could walk up to the top of it when they got their pails filled, an' turn a summerset across the box, dumpin' the berries into it, an' then light on their feet on the other side, an' go on about their business of pickin' berries. If that could be done, as I said before, I'd be all right. But,' and Doolittle sighed once more, 'the worst of it is, a hen can't be trained to turn a summerset.'

"An' when I come away Doolittle was still settin' there tryin' to figger out some plan fer emptyin' them pails of berries without gettin' down off the fence."—Will S. Gidley.

Anything to Please the Ladies

He was old and weather-beaten, his clothes were ragged, but there was a cheerful twinkle in his eye as he stumped noisily around to the kitchen door.

"Mornin,' ma'am," was his greeting to the woman with the acidulated face who held the screen closed. "Would ye like to buy a book o' needles fer only ten cents? Ye c'n look at 'em, ma'am," holding them out invitingly. "They're a bargain, ma'am, an' you'll be helpin' an' ol' soldier airn his livin'. I hate to be dependent on the gov'ment, ma'am," and he moved the stump of his leg into better view.

"Which army were you in?" she demanded, suspiciously.

"Union, ma'am; under Logan. I lost my leg at Shiloh." His eyes searched her face shrewdly to note the effect of his words.

"Union!" she snapped. "I thought so! If you had fought for the South, now—"

"Jest so, ma'am," he put in, smoothly; "I wuz jest goin' to tell you that I wuz a prisoner in the Union army. That air's the way I happened to be thar. I wuz fightin' fer the South, an' I got my leg shot off an' wuz taken pris'ner."

"A likely story!" and her face expressed scornful incredulity. "I certainly shall do nothing to help you now. I would rather give money to a plain tramp."

"Well, ma'am, it beats all how diffrunt ladies is. Most of 'em likes to hear I'm a Union soldier. That air story's sold

lots o' needles fer me. Now an' then I find a woman frum down South, an' then I explain how 'twuz I happened to be in the Union army; an' that air story's done a likely bit o' business fer me. But the fact is, ma'am, I'm just a plain tramp. I got drunk onct, an' fell asleep on the track, an' that's how I lost my leg. I'd jest's soon tell the truth's not, ma'am, an' if it suits you better, an'—"

But the door suddenly slammed in his face.—C. R. Aurner.

Persons with blue eyes are rarely affected with color-blindness. — American Cultivator.

Around the Fireside

Louisiana One Hundred Years Ago

EARLY on the morning of December 20, 1803, the Vieux Carré was astir. In every direction the streets were thronged, while from the country round about horsemen and pedestrians were streaming toward the town. The great crescent of the river was brilliant with ships decked from prow to stern with bunting, and already people were moving back and forth under the trees which crowned the levee. At the head of the Place d'Armes, and facing the river, stood the newly rebuilt church of St. Louis, with the Cabildo, the most beautiful municipal building in America, at its right, and the house of the Capuchin priests at its left, while on each side of the great open square clustered handsome buildings with red tiled roofs and airy, wrought-iron balconies. As daylight began to redden the sky, the Place was already filling with people anxious to behold the approaching pageant, for this was to be the last day of the French dominion in North America.

THE JACKSON MONUMENT AND ST. LOUIS CATHEDRAL

Nearly one hundred years had passed since the founding of New Orleans—years of insecurity and distrust, in which the little band of colonists had been passed from hand to hand. Disowned by the mother country to which they clung so tenaciously that even during the Civil War many still claimed allegiance to France; deceived by the friends whom they trusted; made to feel the full weight of royal displeasure when they murmured and struggled, still with undaunted courage they demanded a hearing.

Since the year 1718, when Bienville, with prophetic vision, dared to move the seat of government from the apparently more desirable site of Biloxi to this low-lying swamp-land in the loop of the mighty river, how many changes had passed over the little colony! Even the river itself had been named and renamed; claimed now by one nation, now by another; thrown open to commerce, then closed against it. Described at one time by the Spaniards as the Rio del Santo Espiritu, having upon its banks countless Indian villages glittering with silver and gold; then, a century later, claimed for the king of France, and named St. Louis in his honor; by LaSalle, who next rechristened it Colbert, and after claiming all the territory north, south, east and west, attempted to plant a colony upon its banks, making with this unsuccessful effort one of the saddest chapters of a tragic life. Finally, after another hundred and fifty years, the mighty river returned to its original Algonquin name of Missi Sepe, the Father of Waters.

In 1763 France, in spite of protests and entreaties, ceded the province to Spain, but finally, in 1803, took back her child.

And what was this province so contemptuously tossed about by the nations of Europe? It was the vast Mississippi valley, extending from British America on the north to the Rio Grande and the Gulf of Mexico on the south, and from the Alleghanies on the east to the unexplored mountains of the Far West.

On March 26, 1803, Laussat, who is described as a "busy man, a former member of the National Assembly," came to New Orleans to receive from Spain this vast province of Louisiana. The Spanish royal commissioner, the Marquis of Casa Calvo, and the old governor, Salcedo, vied with the Frenchman in magnificent hospitalities, and the city was apparently given up to rejoicings.

The summer and its gaieties drew to an end, and the grinding-season—the time of harvest and rejoicing—arrived. It was only eight years since Etienne de Boré had risked everything on a last attempt to granulate the sap of the sugar-cane.

Gayarré, the historian of Louisiana, and himself the grandson of de Boré, gives a graphic account of the interest felt in this attempt. "Many," he says, "had visited him during the year, to witness his preparations; gloomy predictions had been set afloat, and on the day when the grinding of the cane was to begin, a large number had gathered in and about the sugar-house to be present to witness the failure or success of the experiment. Would the syrup granulate? Would it be converted into sugar? The crowd waited with eager impatience for the moment when the man who watched the coction of the juice of the cane determines whether it is ready to granulate.

"When that moment arrived, the stillness of death came among them, each one holding his breath and feeling that it was a matter of ruin or prosperity for them all. Suddenly the sugar-maker cried out, with exultation, 'It granulates! It granulates!' There came a shout of joy, and all flocked around Etienne de Boré, overwhelming with congratulations the man whom they called their savior—the savior of Louisiana."

Eight years had passed since that exciting day on the de Boré plantation, and now a political interest had arisen of such vital importance as to tempt even the planter from his grinding.

Wednesday, the 30th of November, dawned cold and tempestuous, but nevertheless the streets about the Cabildo were thronged with people, the windows and the housetops were crowded, while the Place d'Armes was filled with Spanish troops and native militia. We can imagine the people, ankle-deep in the black, alluvial mud of Louisiana, standing patiently in the cold rain, waiting until noon, when Laussat, the republican prefect, Casa Calvo and Governor Salcedo, accompanied by a large and brilliant retinue of civil and military officers, and by the wealthy and influential men of the province, met at the old Cabildo. After the various speeches and the reading of commissions and treaties, Governor Salcedo delivered to Laussat the keys of the city, and put him in possession of the entire province of Louisiana. The three commissioners then stood upon the balcony overlooking the Place d'Armes, while the Spanish flag descended, the French fluttered upward, and the air was rent with volleys of artillery. But the vast throng looked on in silence, for there had been a report, repeatedly contradicted, but as frequently reiterated, that this pageant was merely a preliminary to the cession of the province to the United States.

THE CABILDO

On the evening of that same day Laussat issued a proclamation, in which he said: "Considerations of prudence and humanity, connecting themselves with those of a more vast and durable policy—worthy, in one word, of the man whose genius weighs at this very hour in its scales the fate of so many great nations—have given a new direction to the beneficent intentions of France towards Louisiana. She has ceded it to the United States of America."

What Laussat really felt we have read elsewhere, and we know that he keenly regretted the selfishness and folly of selling this vast and fertile province in order that Napoleon Bonaparte might have fifteen million dollars with which to prosecute his European wars.

Twenty days later, on the memorable 20th of December, the sun shone radiantly on the French flag waving from the staff in the center of the Place d'Armes. A little before noon the signal-gun gave warning that the Americans were approaching the city. A little later a second gun, answered by a salute from the French batteries, announced that they had marched through the Tchoupitoulas gate. As the twelve strokes sounded from the cathedral-bell, the Americans, headed by James Wilkinson, commander-in-chief of the army of the United States, and by William C. C. Claiborne, the first American governor of Louisiana, and followed by a numerous retinue, passed through the dense crowds into the Place d'Armes. The American commissioners dismounted, and ascended the broad stairway leading up to the ancient hall of the Cabildo. After an interchange of courtesies, Laussat, leading the way to the balcony, seated himself in the chair of state, with Claiborne on his right and Wilkinson on his left. There followed the reading, in both French and English, of the various articles of agreement, the delivering to Claiborne of the keys of the city, and his acceptance in an English speech. And now the great flag of France began slowly to descend. Midway it paused, as if reluctant to abandon forever that loyal colony which had suffered so much. Slowly the Stars and Stripes rose to meet it, until their folds mingled and floated as one banner over the breathless multitude—for one moment only, then the American flag mounted alone to the top of the staff, and the air was rent with volleys of musketry and the cries of the multitude.

"A French officer," we are told, "received the Tricolor in his arms as it came to the ground, and wrapping it about his body, strode away with it to the barracks. The crowd fell in behind as at a funeral, the American soldiers presented arms as they passed, and men in the streets stood with heads bowed and bared."

In this way France threw away the province which the United States, with equal ignorance of geography, reluctantly accepted. The new owners feared the vast extent of territory, "lest," as Madison said, "it might prove detrimental by tempting settlers to the western bank of the Mississippi, and so 'dilute the population.'"

In a message to Congress, in which he strove to justify himself and his purchase by describing the resources of the new territory, Jefferson spoke of the boundless forests, of lake and river, of mountain and prairie, capable of producing limitless wealth. We now know that his descriptions fell far short of the truth, and that the vaguely outlined province comprised a territory greater than Germany, France, Great Britain, Spain and Portugal, and contained treasures beyond even the fabulous reports of the first explorers. The province of Louisiana has become of such priceless value that all the wealth of Europe would fail to give France the right again to unfurl her flag in the old Place d'Armes at New Orleans.—Clara Boise Bush, in The Interior (Chicago).

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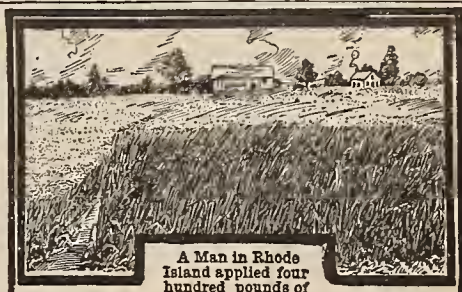

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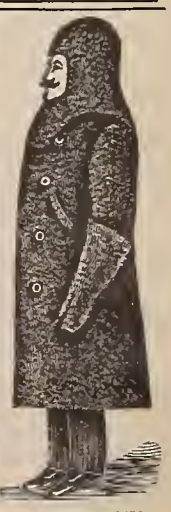

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BUSINESS PRACTICE

Lenten Diet

LENTEN, the spring, denotes that the days are lengthening. Lenten-time is synonymous of the springtime, which signifies new life. It also signifies that there will have to be a change from the past winter's dietary rules, or new strength and new vigor will not be a spring heritage. And the advent of Lent with the season of fasting brings the needed changes. This is a season of the year when the system is clogged with several months' hearty feeding, and it requires a little wholesome restraint to produce a normally healthy condition of the body.

You frequently hear it said that the Episcopalians and Roman Catholics do not need a blood-tonic in the spring, as the lenten fasting yields the same cleansing effects. There is a great deal of truth underlying this, for the majority of people have a tendency to overeat, especially during the winter months, when the cold stimulates the appetite to a continual active working order. Therefore, the keeping of the "Forty Days' Fast" furnishes material, as well as spiritual, benefit. After forty-six weeks of feasting, six weeks seems a very small proportion of the fifty-two to be devoted to fasting, or if one does not care to designate it thus—a word that is offensive to some—the putting of a restraint on the carnal appetite.

Where rich, hearty foods have been essential to produce warmth during the winter months, it is now equally essential that a lighter diet should take the place. The simple act of omitting flesh from the bill of fare two days out of the seven for six weeks, and substituting fish or eggs in its place, will do more for the general health than many bottles of tonic, for Nature is always the best rejuvenator, without the aid of drugs, if given a fair chance.

Whatever the motive be for keeping "Lent"—whether material or spiritual—fish should largely supply the place of flesh in the diet. The coarse elements of the body produced by the grosser food are toned down, and the brain given nutriment from which to draw new strength. Baked fish is one of the most palatable forms in which it can be used, for the rich properties of fish cooked in fats or oil are lacking.

BAKED FISH.—Take any kind of white fresh fish, and prepare as for other cooking. Place in a baking-dish, spread with butter, add a seasoning of salt, pepper and one tablespoonful of lemon-juice, sprinkle with flour, and add one cupful of hot water; cover, and bake until tender. The length of time required for baking depends somewhat on the condition of the oven. Baste frequently.

The cooking at this season should hygienically include a great deal of rice, which is very cooling to the blood. It may take the form of a vegetable, which is the most wholesome form of eating it, or it may be served as entrées and desserts.

RICE CROQUETTES.—Take one pint of cold boiled rice, add one well-beaten egg, a seasoning of salt, pepper and butter, and one cupful of cream. Mold into balls, using a little flour, and sauté in hot lard.

Rice pies are the traditional lenten pastry. These are made the same as a custard pie, with the addition of one pint of cooked rice and one cupful of currants. Bake in a deep pie-dish.

Other cereals have their place in the lenten diet, excepting oatmeal. This is too hearty for spring and summer use. But the market furnishes a pleasing assortment of cereals from which to make selections.

Green salads and fresh vegetables furnish alkaline salts for a blood-purifier and liver-tonic, and vegetable soups made without meat stock are an excellent diet for this season. One of the best is made from canned tomatoes.

TOMATO SOUP.—Fry one small onion in butter, being careful not to allow it to color. To this add one pint of tomatoes, allowing them to cook twenty minutes. To this add one fourth of a teaspoonful of soda, a seasoning of salt and paprika, one tablespoonful of butter, one teaspoonful of sugar, one teaspoonful of corn-starch dissolved in a little milk, and last one pint of rich milk, part cream preferred. Let it come to a boil, and serve with croutons of bread.

CROUTONS.—Spread butter on a loaf of bread cut in very thin slices, place in the oven, and let brown, then break into small pieces; or cut the slices in strips before browning them.

Too much cannot be said in favor of eggs as a spring food, and the ways of cooking them are legion. One of the nicest dishes in which to cook eggs is the small double boiler, or cooker, designed especially for this purpose. It is divided into separate receptacles just large enough to hold one egg, and none of the white is wasted when cooked in this, as in the old way of breaking them into water.

These small cookers are also excellent in which to bake eggs. Break the eggs into each cup as for boiling, add a dusting of cracker-crumbs, a seasoning of butter, salt and pepper, place in the oven, and bake until the yolks are set, but not hard.

Scrambled eggs served on toast are superior to the traditional poached ones served in this way. Place a piece of butter in a saucepan, and when hot break in the eggs, and stir slowly until the whites commence to set, then add the cream, which has been heating in a separate dish, stir until the cream simmers, and season with salt and pepper. Spread over thin slices of toasted bread. Allow one cupful of cream to six eggs.

EGG-AND-FISH PIE.—Boil three eggs in the shells until hard. Pick over one cupful of codfish, boil in one quart of water until tender, and drain thoroughly. Line the sides of a deep pudding-dish with a biscuit-crust, then spread a layer of the eggs cut in slices over the bottom of the dish, followed by a layer of the fish and a layer of powdered cracker-crumbs, and season with butter, salt and pepper. Repeat until the materials are used up. Sprinkle one tablespoonful of finely chopped parsley over the top, add one pint of rich milk, or a little more if the dish is not full, and cover with the crust. Spread the white of a beaten egg over the top. Bake thirty minutes.

All kinds of fresh fruit should be freely used in the lenten diet. Serve it with the morning meal and also as a dessert. Rich pies and pastries should be foresworn during this season.

JOSEPHINE YATES.

DAINTY DOILY

Dainty Doily

This pretty doily has a center of fine linen. The medallions are made of Battenberg braid, the center of each being a ring, which can be bought ready-made. The medallions are caught together with a thread or two of the linen used in working the designs, and fastened to the scalloped edge of the doily with "spider threads" and webs, as shown in accompanying cut.

We have discontinued the handling of patterns for articles in lace, but give an illustration and description of articles of this kind occasionally, which will serve as a suggestion to our readers. L. K. W.

Serviceable Pillow

This useful sofa-pillow is made of blue denim, or if desired, of "blue jeans," such as used in men's working-overalls. The design of "brown-eyed Susans" is made with yellow wash-silk, and the centers of brown. Any country girl or woman will know the exact shades to select. The stems should be worked in sage-green floss silk. The hem of the ruffle is worked in a single brier-stitch the same shade of yellow as the petals of the "Susans." This cover is very pretty and serviceable for the family sitting-room, and very little work is required in the making. L. K. W.

SERVICEABLE PILLOW

Indian Shopping-Bag

This pretty bag is made of soft leather, with the finished surface inside. The outer surface resembles undressed kid. From the leather are cut narrow strips, which form the draw-string and the ornamentation of the side, also the fringe. Indian beads, or "kindergarten beads," as they are called in some stores, are strung at equal intervals on these narrow leather ribbons.

Slits are cut in the side of the bag, for the strips to pass through. The effect is very pretty. The bags can be made in any size desired. The bag illustrated is of brown leather, and the beads are blue and white, and the effect is very pretty and unique. M. H.

INDIAN SHOPPING-BAG

Flour-Sacks, and Their Use

Sheets are made from flour-sacks by several women of my acquaintance who have no little folks to use up the sacks for their various needs. One woman who has little children makes their summer panties, petticoats and their sheets from the sacks. My mother colors them, sews a number together, and uses them to line or entirely cover her quilts. One of the prettiest comforts I ever saw was made thus, dyed a dark blue, and knotted with red yarn. MAY MYRTLE FRENCH.

Tea-Matting Possibilities

Tea-matting can be obtained from any grocer or tea-dealer for the asking, since it is the outside covering of tea-chests, and he has no use for it. Its woven strands of straw-color with the faint tinge of green lends itself to many styles of decoration, and is in great demand for sunbonnets and sun-hats. Bonnets made from it need very little laundering, and never grow limp as do the starched ones.

These sunbonnets are made much after the style of the usual bonnet, with the exception that the top is cut from the matting, which is first pressed smooth with a hot iron. The edges are then bound around with gingham, Turkey-red calico, or whatever kind of goods is chosen for the bonnet; the apron of the bonnet is then sewed on, and a frill of the goods sewed around the front and sides of the top. The bonnet is finished with the usual strings and bows.

Children's sun-hats are fashioned by cutting from the matting a circular piece the required size, then cutting a circular opening in the center just large enough to fit the head. The raw edges are bound around, a crown of goods fitted and sewed on, and finished with a frill and bows. A narrow stiff band is made to fit the opening, and sewed under the brim. Wide strings are fastened to tie under the chin.

Tea-matting makes a beautiful splasher. Turn the sides and bottom edges over carefully, and finish with rope or a cord, then turn the top edge over a slat similar to the ones used in window-shades, and stitch along. Screw in two rings, for convenience in hanging up. If the sides have been finished with rope, a fringe of rope at the bottom is nice. The splasher can also be hung up by rope, and finished with rope tassels at both ends. These tassels are given a fluffy effect by untwisting, combing and picking out the rope ends. Decorate with a swamp scene in which are swamp-grasses, cattails, and water-lilies. The browns and greens shade into the background of the matting, and thus produce a pretty effect.

A screen made from this matting was very pretty. The matting was tacked on the frame with brass-headed tacks. One side was decorated with a flight of butterflies, the other with a grape-vine branch, its large green leaves, rich purple fruit, brown stems and delicate green tendrils giving it an artistic effect.

I once received as a present a dainty work-box covered with tea-matting. A cigar-box was used for the foundation. The sides and bottom were covered with the matting, and the edges fastened with small invisible tacks. The lid was padded with sheet-wadding, then covered with the matting. The edges were bound around with blue ribbon, and the box lined with blue silk. The matting was decorated with all-over designs of stars and crescents in gold, blue and bronze.

A shoe-box is nice covered with this. A square box should be used for the foundation, and casters should be put on the bottom. Cover the sides with the matting, and finish the edges with rope or heavy cord. Paint on the side a design of grasses and wild flowers growing upward from the base, and across the lid a trailing vine with red berries.

A young lady in fitting up a Japanese room used the tea-matting for a border. The room was papered in a plain dull red, and the matting was tacked on with brass-headed tacks; it was then decorated with Japanese figures, flowers and crescents cut out of paper and pasted on, and at that distance, at least, proved very effective.

A practical article made out of this matting is a mat on which to set hot dishes. Cut out two circular pieces the required size, and fell the edges of both together, then bind around with some pretty braid. This gives a double thickness of the matting.

PANSY VIOLA VINER.

The Embroidered Shirt-Waist

The girl who is clever with her needle has now a chance to use that gift, or accomplishment, for embroidering her shirt-waists for the summer. Linen, white and rather smooth, is the material "par excellence" for these waists, that are embroidered in floral or conventional designs with mercerized linen floss.

The shops show very good assortments of shirt-waist patterns already marked for embroidery; or, if one prefers, there are places where the stamping is done to order when both material and design can be selected. Silk waists are done in silk floss. The cross-stitch embroidery done in colors is applied to the straight collar, cuffs and center plait down the front, and sometimes to the belt, as it is now a fad to have the belt of the same material as the collar and cuffs, sets of this kind of white muslin, with spots of color done in crewel, being one of the forms of this fashion.

The shirt-waist with the embroidered fronts will, however, be generally finished at the neck with one of the many and attractive stock collars, which are made up of braids or bands and fancy stitcheries, with the tabs in front. Many girls will make these up at home at much less expense than the shops offer them for. It is a good idea to buy a stock or two of approved style, and copy them at home, or make variations upon them. The narrow bias bands folded and pressed for use can be bought at a low price for adaptation to these pretty collars and cuffs.—The Examiner.

Lemon Lore

Lemons can be kept from molding by stringing them on coarse threads singly, and hanging them on separate nails some inches apart.—The Gentlewoman.

The Housewife

With the Winter Fruits

THE winter bride, or the housekeeper who from any cause has failed to fill her preserve-closet from the abundance of summer, need not necessarily subsist upon a fruitless diet, neither be driven to the unsatisfactory canned fruits of the market; for the winter fruits are here in all their variety, and while oranges, pineapples and bananas may seem too dear for any but the longest purses, there are delicious dried fruits awaiting only the manipulation of an intelligent cook to turn them into delightful desserts or dainty tea-dishes fit for the veriest epicure. The dried fruits for some reason had fallen into disrepute, until within the last few years reputable cooks have brought them to the front, and have put upon them the seal of their approval.

To prove satisfactory, however, one needs not only to cook her fruits well, but also to buy them well. In making a selection, it is well to look to the pulp, to see if it is meaty but flexible, as a thin, hard fruit could only result in a flavorless compound, however well and carefully cooked. Peaches, pears, etc., are better with the skins on, as much of the flavor has necessarily been lost in the peeling, aside from the fact that they are usually cheaper. Whatever the fruit, wash it well before soaking, letting it stand a few minutes in warm (not hot) water, then rubbing each piece between the fingers to extract every particle of sand and dirt. When well washed, rinse in cold water, and put to soak over night in sufficient water to cover. In the morning set the dish, which must be granite or earthenware, over the fire, and cook in the same water in which it was soaked. Stew gently, as hard, fast cooking would do much to ruin the flavor of the finest fruit, and when tender enough to pierce with a fork, add sugar to sweeten slightly (too much would render the fruit insipid), let stand until the sugar is dissolved or until the fruit can be pierced with a broom-splint, and it is done. When cool, the fruit may be served as a relish, either plain or with whipped cream, or it may be made into any one of the following delicious dishes:

PRUNE CAKE.—One cupful of sugar, one half cupful of butter, one third of a cupful of water, three eggs, two teaspoonfuls of baking-powder, the grated rind of half a lemon, one cupful of chopped walnuts, one cupful of steamed and chopped prunes. Bake in a loaf.

DATE PUDDING.—One pint of sifted flour sifted with two teaspoonfuls of baking-powder and one half teaspoonful of salt; one beaten egg, two tablespoonfuls of butter and two tablespoonfuls of sugar creamed and added to the egg, two thirds of a cupful of milk, the sifted flour, and one and one half cupfuls of stoned and chopped dates floured slightly. Mix, and bake twenty minutes. Serve with vanilla sauce.

APRICOT WHIP.—One half pound of dried apricots stewed and chopped very fine. Beat stiff the whites of two eggs, add sugar to taste, fold in the apricots, and bake. Serve with whipped cream, or a custard sauce made of the left-over yolks of the eggs.

DATE MUFFINS.—Separate two eggs; beat the yolks, and add one half pint of milk, one half cupful of finely chopped dates, one and one half cupfuls of whole-wheat flour, one tablespoonful of melted butter, a pinch of salt, and beat thoroughly. Add one teaspoonful of baking-powder with the dry flour, and lastly stir in the well-beaten whites of the eggs. Bake in hot, greased gem-pans in a hot oven for twenty minutes.

SWEETHEARTS.—One cupful of sugar, one cupful of sour cream, one teaspoonful of baking-powder and one half teaspoonful of soda, one egg, a pinch of salt, and flour to make a stiff dough. Roll out one half quite thin, and spread with a layer of finely chopped prunes; roll out the other half, and put on top. Cut in the shape of hearts, and bake in a quick oven.

FIG PUDDING.—Two thirds of a cupful of suet chopped fine, two cupfuls of soft bread-crumbs, two well-beaten eggs and one half cupful of milk. To this mixture add one half pound of figs chopped fine, one teaspoonful of baking-powder and a pinch of salt. Steam three hours, and serve with a yellow sauce.

PRUNE BROWN BREAD.—One cupful of corn-meal, two cupfuls of whole-wheat flour, one cupful of sour milk, one half cupful of molasses, one teaspoonful of salt, one teaspoonful of soda, and one cupful of dried prunes washed, pitted and chopped fine. Scald the corn-meal, add the other ingredients, put the mixture in three baking-powder cans, cover, and steam two hours and thirty minutes.

DATE WHIP.—One fourth of a pound of dates stoned, chopped and cooked to a paste in four tablespoonfuls of hot water. The whites of five eggs beaten until thick and firm, to which add one fourth of a teaspoonful of cream of tartar and one half a cupful of sugar. Add the date-pulp, and bake in a hot oven twenty minutes.

PRUNE SOUFFLE.—One half pound of prunes stewed and chopped fine. The whites of five eggs beaten stiff, and six tablespoonfuls of sugar whipped in. Mix, and bake quickly. Serve hot.

MAUDE E. SMITH HYMERS.

Waist or Coat Hanger

Living in the country, where one cannot buy coat-hangers, I have found a way of making as many as I need at really no cost.

I take about a third of a barrel-hoop, choosing a nice, smooth hoop. I cover this neatly with something from the piece-bag. Sateen, either plain or figured, makes a good covering. Use something pretty that will not soil easily. Put a loop of ribbon in the center, to hang by, adding a bow where the loop is fastened to the hoop.

For those who like perfume, make a small sachet, and fasten to the hoop.

Freshly laundered waists soon get rumpled if hung up by loops in a wardrobe, but with a few hangers one can put several waists one over the other on the same hook, thus saving space, and they will keep fresh-looking.—The Modern Priscilla.

Entire-Wheat-Flour Bread

If wheat contains all the elements needful to support life, then it follows that bread, the staff of life, made from entire-wheat flour is more nutritious than that from the bolted white flour, which contains mainly the starch.

The entire-wheat flour is bolted, fine and soft to the touch, and bread made from it is as fine in every respect as that made from the white flour, but it is not white. To make one loaf of entire-wheat-flour bread, add to one quart of flour two thirds of a cupful of new potato-yeast, or one half cake of compressed yeast, dissolved in a little water. I prefer the potato-yeast, and as a rule I make it myself, but as an exception use the compressed yeast. Add one tablespoonful of molasses, mix with warm milk, and set to raise in a warm place over night. The dough should be quite stiff, so that but little flour and little molding are needed in the morning. Cut in two parts after molding, and place in a pan, raising the same as for ordinary white-flour bread. Bake in quite a hot oven, and bake thoroughly. On removing from the oven rub a little sweet butter over the top, to moisten and soften the crust, which should be quite firm. If these directions are closely followed you will have a rich brown loaf with a sweet, nutty aroma.

A HANDSOME BATTENBERG COLLAR

Slices of this bread with honey, a clear syrup, new butter or thin layers of cheese are excellent for children's lunches, combined with fresh or dried fruits, much to be preferred to the cakes and pies often found in lunch-baskets. It is also excellent to eat with meats, baked beans and other vegetables.

While not wholly discarding the bolted flour of commerce, we do advocate the entire-wheat flour. The two are sometimes used together. I have done this in the proportion of two parts of entire-wheat to one part of bolted white.

Variety is essential. It is never best to adhere too closely to one form of diet. The human economy requires a variety in food. Sometimes we are slow to discover this fact. Let us take truth as it comes.

L. EUGENIE ELDRIDGE.

Cotton Blankets and Spreads

In washing blankets and spreads, choose a warm, breezy day, if possible. Don't try to wash more than two at one time.

Dissolve one square or half a bar of yellow soap. Put in your tub three pailfuls of water as warm as comfortable for the hands, mix in the dissolved soap, and put in the articles. Let them soak at least thirty minutes.

Unless extremely soiled you will not have to scrub them at all; if badly soiled, squeeze out the soiled parts with the hands, then dip and squeeze again until clean. Wring out, and rinse in two more waters slightly warm, using plenty of water.

Do not have the wringer screwed down too tight, as it presses in the wrinkles. Hang out, and when dry take out the pins, take hold of one end of the spread or blanket, and draw it over itself until the two ends come together; get it even, then fold back in the same way, and continue until it is folded as narrow as you wish, then draw off of the line by the center, and fold again. This is a much easier way than to fold after taking from the line.

One day I saw a very large, strong woman pull a blanket from the line and begin folding it. She made hard work of it, and got it folded anything but even, and as she was doing so it dragged on the ground. I thought perhaps there are others who do the same, so I give my way to save them trouble. M. A. F.

FOR A BEE-STING.—One of the best possible remedies for a bee-sting is the juice of roasted onion. Roast the onion in the ashes, and squeeze the juice out hot on the affected part. This remedy, applied in time, has been known to save life.—The Household.

That Nervous Child

That nervous child! How he calls forth our love and sympathy! How he taxes our ingenuity, forbearance and patience! He is to be pitied or envied, according as we know how to treat him.

Character is made or marred by the training which the child receives. Certainly it is true that every child has the right (though too often denied) to be well born. Just as true is it that every boy and each girl should be well trained. And this is especially true of nervous children. These dear, sensitive creatures may, on account of unwise and injudicious treatment, be caused to grow up as physical or moral wrecks; on the other hand, by loving, sympathetic guidance, they may develop into some of the most noble types of manhood or womanhood.

We nervous mothers ought not to be surprised if some of our children partake of this characteristic, and we should see to it that we do not add to their nervousness by exhibiting our own. We should watch ourselves carefully, and see that our nerves do not give way when trying to deal with them.

The child with this nervous temperament is often difficult to manage. Not that he intends to be wilful or disobedient, but he is so finely-organized that the eternal fitness of things appeals to him with greater force than it does to his more phlegmatic brother. He cannot understand why others do not see things in exactly his own light. His nerve-centers appear to reside in his finger-tips, and are continually being hit.

Scoldings and whippings should never be resorted to when a child is already wrought up to a pitch of nervous excitement. His nerves must first be patiently calmed. It is cruelty to endeavor to "break his will" at such time. Break his will! Forsooth! We do not hear so much of that as we used to, and yet some still remain who think the son or daughter will be eternally ruined if the will be not broken completely. There is a great difference between breaking the will and exacting obedience.

Nervous children are of two types—the active and the passive. The first kind are always on the go, inquisitive and acquisitive, but oh, so very sensitive, misinterpreted and misunderstood. If carefully and understandingly reared, they make the inventors, the statesmen, the missionaries, the philanthropists; if wrongfully brought up, they will become schemers and criminals. The second type of sensitive children are quiet, thoughtful, and often intelligent beyond their years. They are extremely retiring, and in many cases neither at home nor at school receive their just dues. But these darlings in the hands of wise parents become the philosophers, the poets, the astronomers, the mathematicians, the thinkers; while, if their parents or guardians do not understand them, all the bitterness of their natures is developed, and they become the anarchists, the recluses, the plotters against society and government.

Do not try to strengthen a child's nerves by opposition. A nervous child must be guided, not driven. If he is timid and afraid of the dark, he should not be compelled to go to bed alone and in the dark; calm his nerves, allay his fears, and he will soon cease to be fearful. He cannot help it. Then do not blame him, but pity him. Give him your loving sympathy, and see to it that he has plenty of nourishing food and outdoor exercise. ELLA BARTLETT SIMMONS.

Work-Table Notes

It is surprising what refined and really handsome effects in the way of trimming can be obtained by the artistic blending of colors in ordinary herring-bone stitches in silk. The yoke, belt and cuffs of a fine wool blouse in dull greeny blue were made very handsome by the superimposing of clear green and écru on blue herring-boning, all done in heavy silks in these shades. As a finish, an edging or bordering line was finely herring-boned in deep old-rose silk. Down the center of the pointed yoke was a band of the embroidery inlaid with cut-jet squares.

By the use of the colors blended in Persian embroidery one can get a Persian-trimming effect at small expenditure of time and money, and this trimming is now very fashionable. Beads, paillettes or spangles, and the flat so-called jewels will work in beautifully with this herring-bone work, and no end of lovely results are thus attainable. Herein is also a suggestion for the decoration of table-scarfs, curtains, etc. The work is very quickly done.

Many and beautiful are the uses to which one may put colored linens and flax-threads. Mantel-valances, table-covers and pillow-slips made up with insertions and edgings of colored linen-thread crochet, tatting or knitting are lovely and durable, and washable when care is used.—Frances E. Fryatt, in The Ladies' World.

Pork Brawn

The head, feet, tongue and ears of a pig should be well salted for a few days, and also the outside skin of a loin of pork, then boil all together very gently until the bones will easily slip out. Take out carefully every particle of bone, put the skin of the loin aside, and cut up all the rest into pieces about an inch square. Have ready some mixed spices and powdered herbs, arranging the flavoring with these according to taste. Now line the brawn-mold with the skin, then roll each piece of the cut-up meat lightly in the spice and powdered herbs, and pack them one by one into the mold. When all are in, put on the top round cover, and press with a heavy weight for twenty-four hours.

A brawn-mold is a cylinder of tin without top or bottom, but with two round pieces of tin which fit loosely inside it, and should be about five inches in diameter and a foot in height. If this cannot be procured, a crock can be used. I. A. G.

ONIONS are very efficacious in clearing the complexion. Every woman should eat them at least once a week. W.

Recompense

Straight through my heart this fact to-day
By truth's own hand is driven—
God never takes one thing away
But something else is given.

I did not know in earlier years
This law of love and kindness;
I only mourned through bitter tears
My loss in Sorrow's blindness.

But, ever following each regret
O'er some departed treasure,
My sad, repining heart was met
With unexpected pleasure.

I thought it only happened so;
But time this truth has taught me—
No least thing from my life can go
But something else is brought me.

It is the law, complete, sublime;
And now, with faith unshaken,
In patience I but wait my time
When any joy is taken.

No matter if the crushing blow
May for the moment down me,
Still, back of it waits love, I know,
With some new gift to crown me.
—Ella Wheeler Wilcox.

How to Like Work

Ever since Mark Twain showed us Tom Sawyer selling, for sundry prized considerations, the hitherto undesired privilege of whitewashing his aunt's fence, we have all had a suspicion that the difference between work and play was purely mental. If we liked work, we have admitted to ourselves it would not be work; but the difficulty has been how to like it.

Here is the place for a new cult—let us, coining a word of the usual mixed pedigree, call it Psycho-manual Science. The brilliant woman who should make herself mistress and priestess of this art would surely do the world much good, and coin a mint of money as well. For who would not go to a teacher who could show one how to work, and like it?

The rudiments of the science are extremely simple, but its application is infinite, and would, of course, require a complete change of mental habit. Let us consider first what the present habit is. When you are washing dishes, for instance, what is in your mind? Don't you wish they would hurry up and get done, and then stay done? And don't you consider that to wash dishes three times a day for three hundred and sixty-five days a year is too much for human endurance? What a distance have you fallen from the innocent days of infancy, when you stuffed a cork into a bottle a thousand times, and chuckled at the chance to do it again! Psycho-manual Science would aim to destroy the false mental attitude of the adult mind, and restore the innocent delight in activity so characteristic of the infant mind.

What, now, is the truth in regard to this matter? It is that in reality you would not do anything else but wash dishes if you could. For what constrains you? No outer power—merely the fact that you prefer clean dishes to soiled ones; therefore, you prefer to wash dishes, or else you would not wash them.

It is difficult to realize this at once, and therefore a course of treatments, and possibly lessons, may be advisable. The next time you are doing something with a very unwilling mind, repeat this formula to yourself again and again until you believe it: "This that I am now doing is what, under all the circumstances, I prefer to do at this moment above all other things. Of course, then, I enjoy it."

This treatment faithfully applied during dish-washing, bed-making, sweeping, dusting, sewing on buttons, darning stockings, housecleaning, even picking up and putting away the miscellaneous belongings of a large and careless family, may be relied on to get the work done in less time and with less friction than ever before, to fill the world with sunshine, and enlarge the soul of the worker. If it does not, it is because you do not understand the true inwardness of it, and a thorough course of study in Psycho-manual Science may be necessary.—Ed., in Harper's Bazar.

The Cat that Went to a Fire

The other day in Boston an alarm came in from Box 9, for a blaze in the tenement-house at 410 Commercial Street, caused by an overturned lamp. A strange sight was witnessed as water-tower No. 2 rolled in upon the scene from its headquarters on Bristol Street. A black-and-white cat, the pet of the repair-shop, had been taking a comfortable nap on top of the tower when the alarm came in. Before he woke up he was on the way to the fire, and, like a good fireman, he stuck to his post. On arriving at the fire he was furnished comfortable quarters, and when the tower was ready to return home he was given a seat beside the driver.—Men of To-morrow.

Selections

The Pilgrim's Load

He halted in the desert to rest his toil-worn feet
And dream of cool, sweet shadows among the dust and heat,
And there, beside the burden borne many a league, he found
A traveler, spent and weary, upon the thirsty ground.

"Oh, could I reach the palm-trees," the poor man made complaint.
"My veins are hot with fever. With weariness I faint."
"Cheer up," the other whispered; "the palms of rest are near.
I'll help you with your burden. You shall not perish here."

"Nay, nay," the other answered. "Go on, and let me die.
Were you to bear my burden, your own you must lay by.
Then for your own, my brother, across the sands to-day
You must come back, to perish, perchance, beside the way."

"I cannot leave you, brother," the pilgrim then replied;
"You need my help, and for my needs God will a way provide."
And then, in his compassion, he took the traveler's load
And cheered his weary comrade along the desert road.

They reached the palm-trees' shelter with weariness oppressed.
The pilgrim in the shadows sank down to sleep and rest,
And in his dreams an angel came, and tenderly said he,
"Bearer of others' burdens, thine shalt be borne for thee."

He woke. Beneath the shadow of towering palms he saw
The load left in the desert, and he was filled with awe.
"Ah, God is good, my brother! Along the desert road
He sent one of his angels to bear for me my load."

Who bears another's burden will find, from day to day,
His own is always lightened or lifted quite away.
—Eben E. Rexford, in The Ladies' World.

Remember the Folks at Home

A friend was telling about a young man who travels extensively in the interests of the firm by whom he is employed. My friend said, "George has always been such a home boy that they miss him very much when he is away on these long trips. But then, his mother gets a letter from him every day while he is away."

"Does he write every day?" I asked, incredulously; for I happened to know a few people who consider it somewhat of an effort to write a letter much less frequently.

My friend assured me that the postman never failed to stop every day with a letter from the absent son. I liked that. It is but a little thing to do, but I venture to assert that it isn't always the news or the message that brings the light into that mother's eyes, but the loving thoughtfulness of her boy, who is never too busy to write to mother. God bless George!

There comes to my mind a little scene in striking contrast: Last Christmas morning I called at the humble home of an aged couple. It was worth while to take my little gift in person, just to see their faces brighten because they had been remembered: During our conversation the mother said, with tears welling up in her faded eyes, and her voice choking, "My son hasn't sent anything this year; he has forgotten his old mother."

The son, who lives in a distant state, had occasionally sent his parents a Christmas present, and the old hearts were sad and lonely this year because nothing had come as evidence that they had been remembered. The pathos of it saddened me as I suggested the possibility of a delay. I have never heard whether they received anything—I never had the heart to inquire. But in this instance, too, I am sure it was not so much the gift they looked for as the affection and thoughtfulness and expression of filial tenderness for which their hearts wistfully yearned.

When I was a very little girl, a picture-book was given to me, entitled "My Mother." The first illustration showed a young mother bending over a crib in which was a little baby girl. The story of the lives of mother and child was continued in each successive picture, and the last one represented the mother, old and bent and feeble, leaning on the arm of her daughter, now grown to womanhood, who tenderly guided the faltering steps. The impression that picture made upon my childish mind has never been effaced. It is but natural and right that the young and strong should become the support and stay of the old and infirm. And nothing appeals to me more strongly than the dependence of the aged.

Then write often, sons and daughters who are away from home. Don't neglect a token of remembrance on anniversary occasions, for the time will surely come when there will be no occasion for these things; and the pangs of remorse can never undo the cruelty of neglect.

It isn't the thing you do, dear,
It's the thing you leave undone,
That gives you a bit of heartache
At the setting of the sun.
The tender word forgotten,
The letter you did not write.
The flower you did not send, dear,
Are your haunting ghosts at night.
—Epworth Herald.

Out of the Ordinary

In the Bernese Alps the limit of perpetual snow is eight thousand feet; on Mount Ætna, some hundreds of miles nearer the equator, it is nine thousand nine hundred and twelve feet; on Popocatepetl, in Mexico, thirteen thousand seven hundred feet, and on Aconcagua, in Argentina, it is fourteen thousand eight hundred feet. And as we continue south the snow-line sinks again nearer to the sea-level—three thousand six hundred feet at Magellan Straits, and three thousand five hundred feet in Terra del Fuego.

Dogs with collecting-boxes attached to their collars are comparatively common in Europe. It may not, however, be generally known what large sums they earn for the charities they represent. It is stated in the last part of the "Animal World" (Hutchinson) that one which used to beg for a hospital in Ireland collected in five years nearly fifteen thousand dollars. He had a special banking-account, which was submitted periodically to a chartered accountant.

The most recent excavations show that Vesuvius began its work as a conservator of antiquity before the memorable year A.D. 79. During the excavations in the valley of the Sarno, near San Marzano, some interesting antiquities have come to light. These had been covered up by a volcanic deposit about six feet thick, which points to an eruption of Vesuvius which must have taken place in the seventh century before Christ. The relics include a Greek burying-place, archaic Italian tombs and various bronzes and terra-cottas.

One of the principal industries of Basel is the manufacture of dye-stuffs—chiefly from coal-tar products—and chemicals. New discoveries are constantly being made by the employees of the Basel factories. The extent of the field in which they labor may be judged from the fact that there now exists no less than twenty-five thousand patents for the single series of so-called "azo" colors, which theoretically are capable of becoming three million one hundred and fifty-nine thousand. The patents mentioned are all granted by foreign governments, since the Swiss lawgivers have up to this time refused to patent anything but what can be represented materially—things, not processes.—New Orleans Picayune.

The Chinese Army

That amiable lady, the Empress Dowager of China, has decided that the Chinese army must be improved. Therefore, she has issued an edict establishing a grand central bureau, which is to furnish uniform military instruction throughout the empire. No doubt the empress' intentions are excellent, but they are not likely to be carried out. China has an immense population capable of bearing arms; and with modern weapons and drill, it might make the "yellow peril" a reality. But the habits and customs of thousands of years are not to be changed rapidly. The irresistible inertia of Chinese conservatism is not to be overcome by edicts. The Chinese emperors put forth edicts, about as practicable, against eclipses and inundations. The Chinese soldier can live on next to nothing, but he is most at home with bows and arrows as his weapons; and rain puts an end to his campaigning. For really he cannot under any consideration permit his paper soles to get wet.—Everybody's Magazine.

A Complete Change of Staff

There is a warning for employees—and possibly a hint for employers—in the story told by "Pearson's Weekly" of "a portly and peppery old gentleman" who halted one morning not many months ago outside a newspaper office in Manchester, England. He sharply scanned the men who were studying the "Help Wanted" advertisements—bulletined for their benefit—and after a time accosted three of the group.

"Stand on the edge of the sidewalk there," he said. They obeyed, curious to know what was up. Other work-seekers who came along were selected in similar fashion, until the group numbered six men and a boy.

"Now," said the old gentleman, curtly, "follow me."

Without a word the wondering seven followed their guide into an old-fashioned suite of offices in a street not a hundred yards distant. Then the old gentleman made them an address, brief but to the point.

Half an hour before, he said, he had found it necessary, on account of gross disobedience, to discharge his entire staff of clerks at a moment's warning. He had grown tired of clerks who were "very respectably connected," had "unexceptionable references," and so forth; he had come to the conclusion that he could not be worse served than he had been lately if he took his whole staff out of the street.

The upshot of the matter was that in the course of the day each of the six men was tested, and had work allotted to him at a salary that made his eyes brighten, while the lad became a merry office-boy. What is more, they have nearly all proved good men and "stickers," so that the old gentleman has had every reason to be satisfied with the result of his experiment.

Yet even less radical measures might have worked well. In another instance the clerks of a foundry near Birmingham were unsatisfactory; but they were not discharged. Instead of that, almost the whole staff was sent into the "works" for a month as laborers.

Their places in the office were filled by eager volunteers from among the workmen, and in this their employers "killed two birds with one stone." Clerks and workmen had previously held poor opinions of each others' work, but when the month was up the employees, almost without exception, resumed their respective places with an alacrity born of extreme gladness.—Youth's Companion.

Current Topics

One half the world's crop of rubber comes to the United States. The demand for it may be due to muddy roads, which poor people traverse in rubber boots, and rich people in automobiles with rubber tires.

The former grand vizier of Persia arrived in Japan not long ago on his way to the United States. He is traveling for his health, as he has been dismissed from office, and suspects that the Shah would like to dismiss him from life, as well.

A Spanish cardinal who died lately left fifty thousand pesetas—about ten thousand dollars—"to the first Spanish general who lands in the United States territory with an army sufficiently strong to avenge the defeats of the Spaniards in Cuba and the Philippines." The sum seems small for the task, but the chances are that it will have increased considerably by the time a claimant appears.

Cecil Rhodes' Cape to Cairo Railway is within sixty miles of Victoria Falls on the Zambezi, and will be there within three months. The road may not be completed in the present generation, but it will not be many years before one may go from the Mediterranean to Cape Town in comfortable cars and steamboats through the heart of the Dark Continent. When the gloom is dispelled by the locomotive headlights, Africa will be light indeed.—Youth's Companion.

Quit Worrying

No matter how the clouds may drift
While scurrying
Across the sky. The winds will shift,
And blue come laughing through the riit—
Quit worrying.

No matter what the crowd may say
While hurrying
Along the way. A brighter day
Is lingering along the way—
Quit worrying.

No matter how the winds may blow
While flurrying
And scurrying. We ought to know
That brighter things are here below,
They're brighter still where we should go—
Quit worrying.
—New Orleans Times-Democrat.

A Presidential Party

IT MUST be admitted that the wits of even the brightest hostess are taxed at this season, when one holiday is no sooner disposed of than another one demands attention; but fortunately there is always something new to be evolved by the clever woman whose brain is fertile in original ideas. A presidential party is suggestive for a Washington's birthday celebration.

The house should be decorated with flags and red, white and blue bunting. To add to the picturesque effect, tie back the lace curtains with ribbons of the national colors. Red, white and blue candles appropriately grouped on the mantels and in other conspicuous places will add greatly to the charming picture.

Aside from the fact that they are invited to a presidential party, the guests, of course, should remain in ignorance until after their arrival at the home of their hostess. When all are present she should ring a bell, and explain that there are to be two contests, for each one of which has been provided a set of two papers with pencils. The papers should be numbered as follows: Two number ones, two number twos, two number threes, and so on, as many sets as there are guests. No names are to be signed, but each participant must remember his or her own number. A timekeeper should be appointed to assist, also three persons who do not take part in the contests to act as judges. In each contest the best paper will receive three points to count toward the prizes—which are awarded at the close of the game—the second two, and the third one. The timekeeper should promptly announce the exact minute of commencing and finishing each contest by the ringing of a bell.

For the first contest allow fifteen minutes' time to answer the following questions, which should be plainly written beforehand on a blackboard or on large sheets of white paper, which may be procured from a printing-office. Each person should number his answers to correspond with the numbers of the questions.

1. What President had a son who became President? John Adams.
2. What President died with the words "This is the last of earth; I am content?" John Quincy Adams.
3. Who was the fifteenth President of the United States? Buchanan.
4. What Vice-President became President by the death of Taylor? Fillmore.
5. What Vice-President became President by the death of Garfield? Arthur.
6. What President fought the last battle of the War of 1812? Taylor.
7. During whose administration did the Louisiana purchase and Burr's treason occur? Jefferson's.
8. Under what President was the War of 1812 begun? Madison.
9. What President outlined a famous foreign policy? Monroe.
10. What two Presidents died the same day? Adams and Jefferson.
11. What three Presidents were assassinated? Lincoln, Garfield and McKinley.
12. What Presidents served as generals in the Mexican War? Taylor and Pierce.
13. During whose administration did the annexation of Texas and the Mexican War occur? Polk's.

When the time is up, collect the papers and lay aside until the game is finished.

In contest number two allow three minutes' time. Have at hand a collection of objects, each one of which will call to mind some President. Hold these up one at a time, so that all may see, then ask them to write on their papers the names suggested, numbering them in order.

1. A miniature log cabin, or a keg labeled "Hard Cider," represents William Henry Harrison.
2. A rail represents Abraham Lincoln.
3. A fish-pole represents Grover Cleveland.
4. A hatchet represents George Washington.
5. A beaver hat represents Benjamin Harrison.
6. A full dinner-pail represents William McKinley.

Other objects will probably suggest themselves to the ingenious hostess. When all have signified that they have finished, collect the papers, being careful to keep the sets separate.

This closes the contest, and each set of papers, with a key to the same, is given to the several judges, who retire to award the prizes, the person to whose account the most points are set down winning the first prize, and so on. An art photograph of one of the Presidents would be very appropriate for the first prize, while a book on the life of one of our Presidents might be given for the second, and one containing short biographies of the ladies of the White House the third. For souvenirs of the occasion give each guest a tiny flag. These may be laid at each plate if refreshments are served at tables. The evening should close by all joining in singing patriotic songs.—Mary Hicks Bush.

$100.00 for a Name

WE WILL GIVE $100.00 IN CASH to the person who suggests the most appropriate name for our beautiful new prize picture, illustrated on page 22. Any one ordering one of the pictures, together with a subscription to FARM AND FIRESIDE, according to the offers below, will be allowed to suggest one name.

We have referred to this picture heretofore as "The Chrysanthemum Girl," but we have decided that the picture deserves a better name, and we will pay $100.00 for it. Can you win the $100.00? See offers below.

$20.00 Extra for Quick Work

If the name the committee adopts is sent during this month (February), we will pay the person suggesting the name $20.00 additional to the above $100.00.

The New Prize Picture is Illustrated and Described on Page 22 of this Paper

AN IMPARTIAL COMMITTEE will be appointed to choose from among the names that which they believe to be the most appropriate. The person suggesting the name which the committee adopts will receive $100.00 in cash.

The Contest Closes April 1, 1904

Ways to Get the $100.00 Prize

1st We will send one copy of this magnificent new picture, together with a whole year's subscription to FARM AND FIRESIDE, new or renewal, and allow you to suggest one name for the picture, for only 40 cents. Order as No. 54.

2d For One Dollar we will send three yearly subscriptions to FARM AND FIRESIDE (regular clubbing rate is 35 cents each), and three pictures, and you will be entitled to suggest three different names for the picture. The papers and pictures can go to different addresses. Order as No. 54.

We will pay agents, canvassers and club-raisers a handsome cash commission to take orders, in connection with yearly subscriptions to FARM AND FIRESIDE, for this beautiful picture that needs no frame.

I suggest as the name for the picture _____

_____

Name of Sender _____

Post-office _____

County _____ *State* _____

Send your order for the paper and the picture (No. 54) on a separate sheet of paper. If you send more than one name, write the others on separate pieces of paper about 3 by 4 inches, with your name and address written thereon.

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO

George Washington's School-Days

The great and good man whom we affectionately call "The Father of His Country" was, as all great men have been, a manly little fellow, even if he did cut down the cherry-tree, as they say he did. A writer in "The American Boy" tells of George Washington's days in an interesting manner.

When twelve years old George entered the neighborhood school near his home in Westmoreland, Va. At Wakefield his teacher was a Mr. Williams, who had come over from England, where he had been a teacher in Wakefield Academy in Yorkshire.

While in Mr. Williams' school Washington drew up a code of rules of conduct. In these rules Washington pictures the boys whose manners should be avoided. Here is an exact copy—spelling, punctuation and all—of some of these rules:

"Do not Puff up the cheeks, Loll out the tongue, rub the hands or beard thrust out the lips or bite them or keep the lips too long open or Close.

"Kill no vermin as Fleas Lice ticks &c., in the sight of others. If you see any filth put your foot dexteriously upon it. If it be on the cloaths of your Companions Put it off privately, or if it be on your own Cloths return thanks to him who puts it off.

"Shake not the head Feet or legs rowl not the Eyes, lift not one eyebrow higher than the other wry not the mouth and bedew no man's face with your spittle by approaching him while you speak.

"Put not off your cloths in the presence of Others nor go out of your chambers half drest.

"SHIFT not yourself in the sight of others nor Gnaw your nails.

"KEEP your Nails clean and short, also your Hands and Teeth clean, without showing any great concern for them.

"WHEN you Sit down Keep your feet firm and Even without putting them one on the other or crossing them.

"IF YOU Cough Sneeze or yawn do it not Loud but; privately and Speak not in your Yawning, but put your handkerchief before your face and turn aside.

"Spit not in the Fire nor Stoop low before it neither put your hands into the flame to warm them nor set feet upon the Fire especially if there be meat before it.

"At Play or at fire it is good manners to give place to the last-comer, and affect not to speak louder than ordinary.

"WEAR not your Cloths foul unript or Dusty but See they be Brush't once every day at least and take heed that you approach not to any uncleanness.

"In your apparel be modest and endeavor to accommodate Nature rather than procure Admiration Keep to the Fashion of your equals Such as are Civil and orderly with respect to Times and Places.

"BEING at meat scratch not neither Spit cough or blow your nose except there be a necessity for it.

"TAKE no Salt nor cut Bread with your knife greasy.

"If you soak Bread in the Sauce let it be no more than what you put in your Mouth at a time, and blow not your Breath at Table but stay till (it) Cools of it Self.

"Put not an other bit into your Mouth with your Knife in your Hand neither Spit forth the Stones of any Fruit pye upon a Dish nor cast anything under the Table.

"Put not another bit into your Mouth til the former be swallowed let not the Morsels be too big for the jowls.

"Cleanse not your teeth with the Table Cloth, Napkin, fork or knife, but if Others do it let it be done with a pick tooth.

"RINCE not your Mouth in the Presence of others."

On Christmas Day, 1779, the schoolhouse in which Washington had laid the foundations for his greatness burned to the ground, destroying the school-books, maps, etc., of Washington's school-days. School-boys in those days wrote out in rude blank-books maps, arithmetic tables and copies of practice in penmanship. This was largely because there were so few books to be had. About all the facilities Mr. Williams had were a big globe, a wall-map, and a geography as big as a family Bible. Each boy really had to write his own geography, and there is in existence the one that Washington wrote. Here is how he bounds America:

"America is bounded on ye East with ye Atlantic Ocean on the West with ye Pacifick Sea and on the North without Bounds on the South by ye Megellanie Sea."

There are many pages in this geography. Some of them are filled with astronomy work.

As will be imagined from the rules of conduct we have quoted, Washington was a neat boy, though not a fop. One of Washington's biographers, speaking of Washington's play, says that he could never endure trifling games, such as marbles and tops. His delight was in a manly sort of game—jumping with a long pole, heaving heavy weights, running, wrestling, etc. In these he excelled. He early cultivated an exceedingly accurate eye for measurement, and it is said that Mr. Williams was especially skilful in this, and that a good part of his instruction lay in the measuring of distances with the eye.

From Washington's manuscript-books we learn that he studied arithmetic very thoroughly, even geometry and trigonometry. He left school just before his sixteenth birthday, the last months of his schooling being devoted to higher mathematics and surveying.—Cumberland Presbyterian.

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How to Dress

When women realize that their clothes reveal their character, that they are in a sense the outer sign of an inner grace, then will they give them the thought and careful attention that they deserve.

Slot-Seam Shirt-Waist

Here's something new in the way of the always serviceable shirt-waist for every-day wear. Though it is made of one of the heavier cotton wash-materials, it is cut low in the neck, and finished with a small turn-over collar. It is a slot-seam shirt-waist with a box-plait down the center front and a slot-seam at each side of the plait. These slot-seams are also in the back, which otherwise is plain. The bishop-sleeve has a slot-seam running down the upper side of the sleeve from the shoulder to the cuff. The turn-over collar and deep cuffs should be of a contrasting color from the material used for the waist. With this shirt-waist is worn a linen collar and chemisette, or a stock of tucked lawn or silk with a chemisette attached. This shirt-waist will be most serviceable if made of any of the fashionable cotton vestings, and it would also look well in cotton brocaded waisting; but be careful in either of these materials not to select too heavy a quality. The collar and cuffs should be of the same material, only in a different color. The buttons are purely ornamental, and may be used or omitted, as preferred. This is also a good-style model for a silk or mohair shirt-waist. The pattern for the Slot-Seam Shirt-Waist, No. 228, is cut in sizes 34, 36, 38 and 40.

SLOT-SEAM SHIRT-WAIST

Miller Shirt-Waist

The wash-waist is to be worn right through the winter, especially by the school-girl and the young business woman. The Miller shirt-waist is an excellent model to make up in cotton cheviot, madras or heavy linen. The yoke cut with the tab-pieces gives a pretty touch to the waist. At the back there is simply a straight yoke, the tabs being used only in the front. The very full bishop-sleeve is one of the favorite shirt-waist sleeves of the season. The Miller Shirt-Waist, No. 41, is cut in 14 and 16 year sizes and in 34 bust.

MILLER SHIRT-WAIST

SETON SHIRT-WAIST

Regent Princesse Gown

(Republished by Request)

The princesse gown is to be one of the smart fashions this year. For the woman of fifty who still has a figure of which to be proud it is well worth considering. A distinctive princesse gown with a decided air of style about it is the Regent, which must be cut and fitted with unusual care. Buttoned-down straps are the only trimming of the gown. They are arranged so as to cover the seams.

REGENT PRINCESSE GOWN

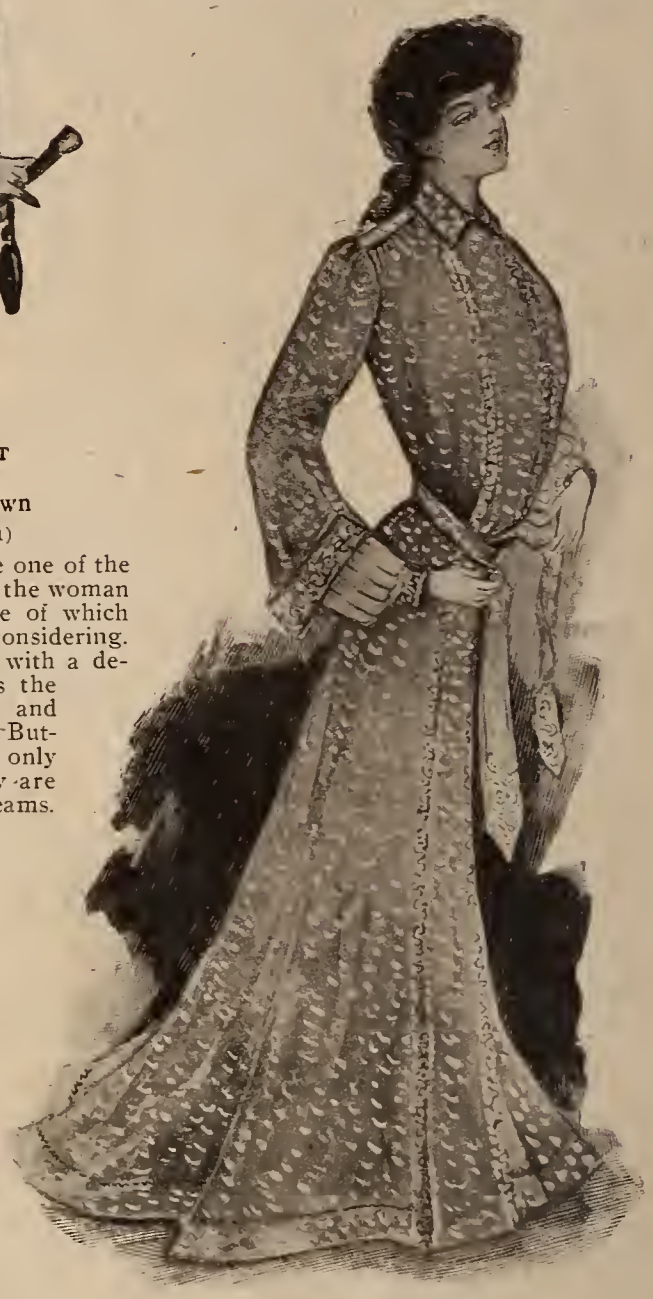
The lower part of the skirt at the sides is laid in plaits simulating a plaited flounce. There is no seam down the center back. Instead it has a habit-effect. The sleeve, which swells out below the elbow, has the same strapped trimming that is used on the gown. The costume hooks up the back in order to get the unbroken line of the fitted bodice in front. One of the new autumn mohairs would be a suitable material to use for this princesse gown. Faced cloth would also be appropriate, and of course it would be charming in silk. The straps should be of the same material as the gown, though they may be bound with velvet or cloth of a different shade. The pattern for the Regent Princesse Gown, No. 187, is cut in sizes 36, 38 and 40.

Seton Shirt-Waist

For every-day wear the Seton shirt-waist has much to recommend it. It is simple in design, smart in style. It is admirable as a shirt-waist for school wear, and the athletic young girl will find it useful as well. The waist is extremely easy to make. It is a plain shirt-waist. The yoke effect is produced by the trimming. In hunter's-green French flannel, with the stitched bands of the same shade of flannel, it makes a stylish shirt-waist, especially if the bands are caught with small pearl buttons. It would also look well in any of the bright plaid flannels, with the stitched bands in a plain color. The pattern for the Seton Shirt-Waist No. 39, is cut in 14 and 16 year sizes and in 34 bust.

Marion Wrapper

The Marion wrapper, though a negligée gown, gives the figure a trim, smart look. It is made with a semi-fitting back, and the fullness at the waist is confined with either a satin ribbon or braided ribbons. This dainty wrapper may be made of a variety of materials—embroidered French flannel, light-weight Henrietta cloth, the very new silk flannel, cotton crêpe, cashmere, or the inexpensive honeycomb Shaker flannel. The Marion Wrapper, No. 45, is cut in sizes 32, 34, 36, 38 and 40.



MARION WRAPPER

Fashionable Petticoats

That the new round skirts may have the proper flare at the hem, petticoats are made very full below the knee. A close adjustment must be maintained around the waist and hips. The fashionable tendency is toward neat tailored styles, with ruffles or plaitings, and stitched bands. The deep, graduated accordion-plaited flounce is still popular, and this, reinforced by several narrow pinked ruchings, makes a most desirable finish for a petticoat. In the more dressy affairs dust-ruffles are used, and the flounces are daintily trimmed.—Modes.

PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each, excepting the Princesse Gown and the Marion Wrapper, which each require one cent extra for postage. Send money to this office, and be sure to mention number and size of pattern desired.

Our Fall and Winter Catalogue sent to any address free.

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BOOK DEPARTMENT

FARM AND FIRESIDE, Springfield, Ohio

Prize Puzzles

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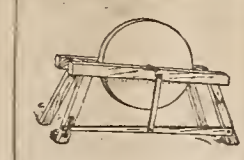
Residents of Springfield, Ohio, are not allowed to enter the contests.



THE FRUIT PUZZLE

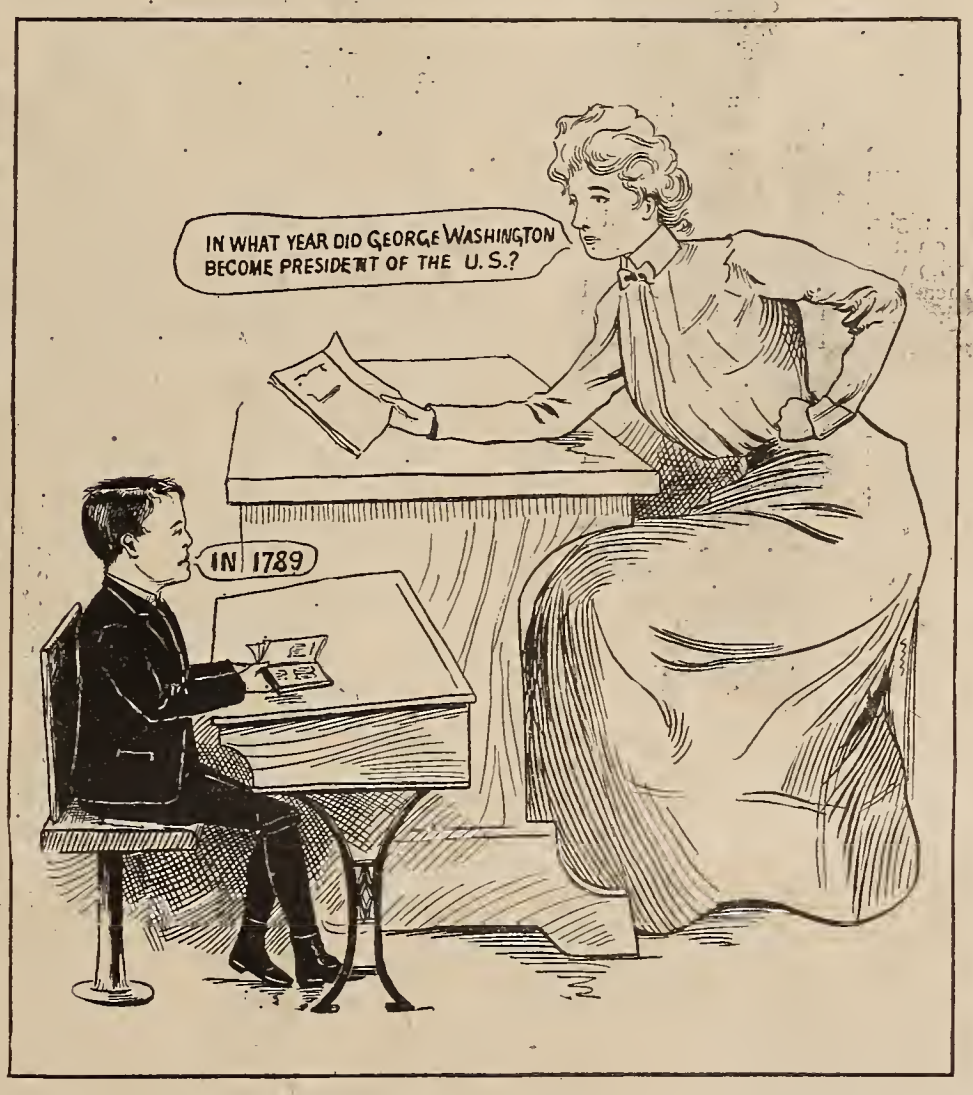
Here are the Names of Six Kinds of Fruit. The First is Represented by the Picture. The Others are Hidden in the Five Sentences Which Follow. Can You Make Out the List?

2—The Delusions of Hope are Many.
3—"Bring Rape and Millet Seed from Town, John."
4—The Jap Pleaded in Vain for His "Rights," Now He Prepares for War.
5—The Amount of Ignorance in This Country is Deplorable.
6—The Correct Name for Anger is Madness.

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before March 1st.

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a beautiful monotint picture of George Washington will be given for the first correct list of answers received from each state and territory. This means a picture for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the prize pictures will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.



ANSWERS TO PUZZLES IN THE JANUARY 15th ISSUE

The Kitchen-Articles Puzzle

1—Skillets.
2—Broom.
3—Sink.
4—Pail.
5—Pan.
6—Salt-cellar.

The cash prizes are awarded as follows:

Woman's cash prize, two dollars—Mrs. L. F. Channon, Washington, District of Columbia.

Girl's cash prize, two dollars—Miss Alice B. Almy, Bristol, Rhode Island.

Man's cash prize, two dollars—Aldus Barr, Millersville, Pennsylvania.

Boy's cash prize, two dollars—Raymond Pearce, Germantown, Ohio.

As a consolation prize, a three-sheet floral art calendar is awarded to the following persons, whose lists of answers were the first to reach us from their respective states:

California—Mrs. J. J. Jones, San Francisco.
Canada { British Columbia—Mrs. H. P. Lewis, Asbcroft. Nova Scotia—Mrs. Enola E. Chnte, South Berwick.
Connecticut—Mrs. M. T. Beckwith, New Haven.
Florida—Mrs. Maud B. Little, Ocala.
Idaho—Mrs. Geo. T. Rhoads, Payette.
Illinois—Anna Courtright, Sandwich.
Indiana—Grace C. Crist, Liberty.
Indian Territory—Mrs. Edith Iliff, Centralia.
Iowa—Helen G. Clasen, Shelby.
Kansas—Albert Walton, Leavenworth.
Kentucky—Miss Sallie Walters, Sonora.
Maryland—Mrs. Geo. A. Thompson, Phœnix.
Massachusetts—Blanche S. Fox, Newburyport.
Michigan—Aaron Ryan, Kendall.
Missouri—Mrs. Eva McGee, Kirksville.
Nebraska—Miss Rose Durkan, Fairmont.
New York—Agnes Spiers, Binghamton.
Ohio—Mrs. G. K. Muntz, Zanesville.
Oregon—Miss L. L. Woodward, Forest Grove.
Pennsylvania—Mrs. R. S. Battles, Girard.
South Dakota—Mrs. Gertrude Wahlin, Spearfish.
Tennessee—Miss Ione Sowell, Columbia.
Texas—Mrs. L. M. Baines, Roundrock.
Utah—Clara Palmer, Cedar City.
Vermont—Mrs. G. P. Collins, North Ferrisburg.
Virginia—Mrs. P. B. Young, Oakridge.
Washington—Nettie L. Service, Fairfield.
West Virginia—Mrs. R. A. Kincaid, Summersville.
Wisconsin—Miss Zara Calkins, Marshall.

Conundrums

Which is the most awkward time for a train to start? Twelve-fifty, as it's "ten to one" if you catch it.

Why is the bridegroom often more expensive than a bride? Because the bride is given away, but the groom is often "sold."

Why is a person reading these conundrums like a man condemned to undergo a military execution? Because he is pretty sure to be "riddled" to death.

Why are two young ladies kissing each other like an emblem of Christianity? Because they are doing unto each other as they would men should do unto them.

Dancing Taught Free

Any One Can Learn to Be a Graceful Dancer in a Very Short Time in Their Own Home Without the Aid of a Teacher

Any one, no matter how awkward they may be now, can quickly learn to be a graceful and beautiful dancer by following the instruction given in the course of dancing lessons which we will send free of charge to any address. Dancing is the most innocent, beneficial and popular diversion known to society.

The most awkward child quickly becomes a perfect and graceful dancer by following the simple instructions which we send free. All children take naturally to dancing, and all they need to know is how to make the steps, which are so clearly illustrated that they can understand the instructions without the aid of an older person. Nothing will give a child such pleasure, and at the same time add to its accomplishments, as will a knowledge of dancing. It has been almost impossible for many children to receive instruction in this beautiful art, but now all may learn. Parents who wish their children to be happy, healthy and graceful should send for this course of free instructions for their children, even though they do not care for it for themselves.

Both sexes can indulge in it with equal propriety and enjoyment. Those who have not had the advantages of mingling with polite society, who are bashful, awkward, and are unable to enter the presence of company or strangers, will acquire within a short time perfect ease and faultless carriage. With it you will take on a degree of confidence in yourself which will be practically useful under many varying circumstances.

These lessons are so clearly written and illustrated that the most awkward person will soon be able to dance gracefully. They teach the waltz, with reverse, two-step and three-step in ten to fifteen minutes. They are free. They are not for sale. We are giving these lessons to all subscribers to the Home Queen, a popular journal. It is beautifully illustrated, nicely printed, and contains such valuable and useful information. There are special departments giving instructions on many matters of interest to the ladies. A department of fancy-work; a department devoted to housekeeping, where our lady readers can exchange recipes and get information on any perplexing problem; a department devoted to flowers and their culture; a department devoted to dressmaking; and a department, which is especially interesting to young girls, on health, beauty and manners, and added to all this, its many interesting stories are of the highest class.

We will send this complete course of dancing instructions to all new subscribers of the Home Queen. The price now is 25 cents a year. Here is an unheard-of opportunity of securing one of the best home papers published for one full year for 25 cents. All new subscribers get the course of dancing lessons free. Send 25 cents in stamps or silver to-day to the Home Queen, 118 Chaplin Street, Waterville, Maine.

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Comrades of Travel

By FRANK H. SWEET

CHAPTER XVI.—CONTINUED

PAGE took both letters to Mrs. Payne. "Well, what do you think?" he asked, after she had read them.

"I hardly know what to think. That Mr. Wittles is a funny man, but he—"

"Seems to hit the nail on the head," finished Page, smiling. "Yes, Mr. Wittles has quite a talent that way. Now, my plan is for us to take his advice and the next train. Yes, us," in answer to the quick look of surprise that flashed to her face. "Mr. Payne will not be here under five or six days, at least. It is only about seventy miles down to Cocoanut Grove, and the trip will be a pleasant one. We will go straight to Peacock Inn, for I think the time has come to beard the lion. You will have an opportunity to speak with Miss Dorothy, and I—I may—er—find an oppor— But excuse me," hastily, "you do not object to meeting your sister, I suppose."

Mrs. Payne was silent for some moments. "No, I do not object," she answered, in a low voice. "I have never felt hard toward Katherine, except on Will's account. I am willing to meet her, to be friends with her, sisters even; but on Will's account she must make the advances. Indeed," an eager anticipation coming into her voice, "I will be glad to go down with you, to meet Dorothy. When will we start?"

"At once. A special train has been put on to Miami recently, leaving here at about ten." He looked at his watch. "You have only twenty minutes to get ready," he warned. "Don't take anything but a few light necessities in a hand-bag. We will probably be back inside of two or three days."

Bill Wittles was lounging along the road between Cocoanut Grove and Miami, a mile from the Inn, when they approached. As he recognized them, he threw up his hands with a sudden shout.

"Hi! Hi! Page Withrow!" he yelled, swinging his hat above his head as he hurried toward them. "It's bully to see you ag'in. Evenin', marm," ducking his head to Mrs. Payne. "You're in good comp'ny. An' Page is in good comp'ny, too, marm," affably; "mighty good comp'ny, I don't doubt a bit. But say, Page," lowering his voice to a stage-whisper, and bulging out his eyes excitedly, "they're in a kittle o' fish back there. You jest drive the lady to the hotel, an' then sneak 'round to where I be. Don't you try for no job to-day. We'll jest hang 'round till the squall's over, an' steer 'cordin' to the wind. But I do wish you could 'a' peeked down over the banisters," regretfully; "the show was mighty stirrin', an' worth a front seat in the dress-circle. Fust old Shuteyes got a letter that made him swear blue brimstone—no, I don't quite mean that, you know," grinning, "but he was b'ilin' hot. Loud in talk an' Loud in name came down last night, an' he an' Shuteyes an' Thornton was out on the peazzer a long time, laughin' 'bout somebody who was goin' to go 'kersplash' an' strike on his head. I wa'n't very close, but I had my good ear cocked up, an' I guess I tumbled to all but the name. Sounded to me like you, Page, but o' course 'twa'n't. Well, this letter seemed to turn the 'kersplash' tother side up, an' it struck Shuteyes full in the face. An' mad! Say, Page," doubling himself over in convulsive remembrance, "I do wish you could 'a' looked in the winder. Loud in talk an' Loud in name tried to say something consolin', an' old Shuteyes flamed 'round an' cussed him an' his snide railroad all to pieces, an' when Loud in talk an' Loud in name tried to smooth it off an' explain, old Shuteyes run him off the peazzer, neck an' heels an' railroad. Mad! Great Cæsar! seemed to me he was. Thornton hitched up, an' laid a hand on his shoulder, real soft an' affectionate, an' Shuteyes jest give him a kick, an' knock—not quite that, o' course, but he bit off words that meant Thornton was to hit the road, an' that no milk-an'-water puppy like him was made to be heir to millions. That's gospel, jest as he cussed it. I do wish you could 'a' seen the curtain come down, Page. There was Shuteyes stalkin' off to the railroad like a drum-major, an' Thornton sneakin' through the bushes like a rooster with his comb froze, an' way off yonder in the distance was a bobbin' speck that might 'a' been a coal-car off the track, but 'twa'n't. It was Loud in talk an' Loud in name kitin' for some place that wa'n't on Shuteyes' map. Say, Page, if you an' me could only 'a' been up in a gallery with our pockets full o' peanuts, wouldn't we 'a' stamped an' flung shells? Whoopee!" And forgetful of Mrs. Payne's presence, Wittles emitted a yell that would have done credit to a Comanche Indian. Then he looked abashed.

"Scuse me, marm," he apologized; "but I keep thinkin' it's jest me an' Page here. That's the way we act when we're off by ourselves. You know how 'tis—er—no, you don't, bein' a woman. But me an' Page does. An' say, Page," his face lighting up again at the thought of being sufficiently excused, "the curtain wa'n't all. Behind it was jest about as lively. The Duchess was tearin' her hair, an' snortin', so to speak, an' there was Dorothy, lookin' sweet an' scared, an' in the background an' wings was the 'supes' an' scene-shifters. Seems like the Duchess had bet her pile on the snide railroad, an' it looked like the whole caboodle was runnin' off the track, engine, paper-boy an' all. I lit out. An' now, if I was you, Page, I'd drop this fare at the back door, an' sneak off. The Duchess is hot enough jest now to strike sparks if she's looked at. An' say, Page," lowering his voice a little, "try an' talk the fare into a three-figger tip, besides seein' she pays the coachy. It's worth something to play guide to a woman."

"Thank you, Mr. Wittles," Page answered; "I suppose you are right. But perhaps I had better go on to the Inn, and see how things are progressing. It will be time enough to sneak off then. And say, Bill," lowering his voice with a shy glance at Mrs. Payne, "I'm much obliged for your hint."

CHAPTER XVII.

CONCLUSION

Mrs. Spencer-Browne was on the lower piazza of the Inn, her face drawn, her eyes staring vacantly. No other guests were visible. The men were probably off fishing, the women in their rooms or calling on some of their cottage acquaintances. A girl was just disappearing among the wild-lemon trees south of the hotel. Page saw her with a sudden purpose coming into his eyes. Even at that distance, half hidden by the foliage, he could recognize the well-poised head and graceful carriage. He had an almost irresistible impulse to spring out and follow, but he did not. He waited until they arrived at the hotel entrance, where he assisted Mrs. Payne to alight, and paid the coachman. Then they went up the steps to where Mrs. Peacock awaited them. Leaving Mrs. Payne with the landlady, he went directly to Mrs. Spencer-Browne.

"I understand there has been some difficulty with Mr. Burley," he said, inquiringly. "Can I be of any assistance?"

She turned coldly, but her lips were trembling. "No; you can do nothing. It is beyond condolence, though I suppose even that should be appreciated. If only there were a good lawyer here with whom I could advise."

"Perhaps I could be of some assistance in that way," he suggested. "I included law in my curriculum, and have had quite a good deal to do with business in one way or another. And believe me, Mrs. Spencer-Browne," cordially, "whatever I am able to do is wholly at your service."

She looked at him doubtfully. "Yes, I believe it is," she replied, simply, "though I am afraid you cannot help me in this case; and besides," hesitatingly, "I haven't been very friendly toward you lately." She was silent for some seconds, as though debating the question, then went on, hurriedly, "But I must have advice, and whatever you tell me, Mr. Withrow, I know will be straightforward. I have never doubted your fairness, even when I—I disliked you the most. My case is this: I put all my available property into the railroad, thinking that it would surely return quick and large profits. I was a fool, of course, but we will not discuss that now. I had implicit confidence in the judgment of Mr. Burley. Last night there was a disgraceful scene here between him and—er—his associates. I heard part, as did all the rest of the guests. It amounts to this: The railroad was the flimsiest of money-making schemes, as both were angry enough to admit. They are gone now, and the railroad is at an end, and my property—"

"Yes, I think I understand," Page interrupted. "You need not tell me any more unless you wish. I am to force this Mr. Burley to disgorge?"

She shook her head. "No; he is too powerful. And I'm afraid that you have lost what little you had left, for I saw your name on one of the circulars as vice-president. I don't wish you to cripple yourself further on my account. All I want is some advice. I still have my house in New York, and must raise some money on it at once. Will you tell me how? You see," her voice dropping to a whisper, "I—I haven't money enough to meet my expenses here nor to return."

A quick light flashed into Page's eyes. Mrs. Spencer-Browne must certainly have passed through some bitter reflections to have brought her to this abject confession, and for a moment he had an odd feeling that a prolongation of the unusual condition might be for her ultimate good; but there was such utter dejection and misery in her face that he relented. He would relieve her mind at once. But at that moment there was a quick step beside him, and Mrs. Payne was in front of her sister, her eyes full of forgiveness and sympathy and love.

"Kate!" she said, tenderly. "Katie!"

At any other time, or under other circumstances, Mrs. Spencer-Browne might have recoiled, have regained control of herself; but the meeting was unexpected, and for the moment she was not herself—her later self. She stared helplessly at Mrs. Payne, her eyes filling, her lips quivering. Then—

"Oh, Alice! Alice!" she sobbed. "I—I—"

Page walked quickly toward the other end of the piazza. Mrs. Peacock withdrew discreetly into the office. At the end of twenty minutes Page returned to where the two women were sitting. Mrs. Spencer-Browne was still crying softly, but much of the trouble had already left her face. Mrs. Payne was holding one of her hands, patting it caressingly from time to time.

"You needn't mind the money a bit, dear," Mrs. Payne was saying. "My husband will have enough for all of us. Yes," in answer to the sudden color and surprise in Mrs. Spencer-Browne's face. "Will has just sold a half interest in one of his patents for a small fortune, and he has a lot of other patents and plans in view. You see, Will has never given much thought to mere money-getting. He cared more for his work and his plans. But the money had to come in its own time. Will is going to be a rich man some day, in spite of his disregard for money."

It was her only revenge, and it was brief, but the expression on Mrs. Spencer-Browne's face made it complete. With that look went out the last of Mrs. Payne's resentment and pride. Again she caressed the hand that was trembling in her grasp.

"Perhaps it is not so bad as you fear, dear," she said, hopefully. "Mr. Burley may restore—"

"Mr. Burley will be made to restore everything that you confided to his care, Mrs. Spencer-Browne," declared Page, positively, as he joined them. "You need not feel the least apprehension. I know something of Mr. Burley and his methods, and he will be glad to save himself from greater complications by doing this. And as to Mr. Loud," his face hardening, "I have an idea that my name on his circulars as vice-president will prove very much to our advantage just now. It was put there without my consent, fraudulently, as I can prove, and I shall take advantage of it and a few other facts in my possession to the uttermost. In case any of your property has been turned over to him, he will give it up very readily under the pressure that I shall bring to bear. And I think that before I am through with him," grimly, "Mr. Loud will abandon all thought of promoting any more schemes in Florida. Now— Ah! good-morning, Mr. Thornton. Do you wish to see me?"

"Yes, if you please, Page. I—I—You see," hurriedly, "there have been some changes. Is the—er—pineapple plantation still open to me?" And Harry Thornton stood before him, his face embarrassed, his shoulders sloped dejectedly forward.

Page looked him over quietly. "I have other plans for it, Harry," he answered at length, "though perhaps I can get you a position as manager under the new owner—that is, after you have learned the business and made yourself competent. Do you think you can apply yourself seriously to the work, Harry?"

"Y-es, I think so," hesitatingly. "But I'd rather have full swing, like you planned at first."

"Too late for that," said Page, curtly. "Besides, I think it will be better all round for you to work under some one than to have full swing. Shall I get you the position?"

"If you don't mind," said Thornton, dispiritedly. "I've got to have something."

"Very well. And now, ladies, if you will excuse me, I will take a short walk."

As he went down the steps, Mrs. Spencer-Browne looked at Thornton curiously. Her mind was becoming accustomed to unexpected shocks.

"Mr. Withrow seems to be quite a philanthropist, considering his limited resources," she observed.

"Limited resources!" echoed Thornton, irritably. "Why, I've seen Page hand out a thousand dollars to a perfect stranger just because he'd done something that Page fancied. He could draw me a check for fifty thousand dollars, and not feel it; and he ought to."

"I've understood that Mr. Withrow was given to rather Quixotic freaks of generosity during his opulent days," said Mrs. Spencer-Browne. "If it hadn't been for that he might be well-to-do now."

Thornton sniffed. "Page hasn't crippled himself much," he grumbled. "People with more money than they can use themselves ought to share it around. I don't believe in one man owning all."

Mrs. Spencer-Browne was recovering her equanimity. Although she did not understand how it was to be done, Page's calm assurance that her money would be restored had impressed her. And the very pusillanimity of Thornton had a tendency to steady her nerves.

"I would think that Mr. Withrow had already done quite well by you," she observed, drily. "A half-million in a single investment, and then the bulk of what he had left in this pineapple plantation, which he originally meant for you."

Thornton stared at her questioningly, then broke into a short laugh. "And you think that's the bulk of Page's fortune," he said, derisively. "Pshaw! it isn't a month's spending-money. I've been with him more or less ever since he was a boy, and know as much about him as anybody. There are copper interests in Michigan that five million wouldn't touch, and lead-mines in Colorado that five more wouldn't buy. Done well by me? Bosh! Didn't I pull him out of the river when he was a boy? A million wouldn't be a cent too much."

Page had walked rapidly to the wild-lemon trees, and then followed the winding path under the clumps of bamboo, past the cocoanut-palms, with their circling clusters of big brown nuts, and on past the royal palms, and into the denser tropical growth beyond. But he had no thought for the wild beauty around, and only when he caught a glimpse of something white through the foliage ahead did his pace slacken.

She was standing near a great tree which had fallen in an arch over the path, her back toward him, her eyes gazing dreamily across the tropical undergrowth to the waters of Biscayne Bay, which lay beyond. She did not notice his approach until he was very near, then she turned suddenly, her face expressing inquiry, then pleased recognition, then something else. He was coming toward her swiftly now, his face eager, his eyes steady and full of a purpose which she could not mistake, both hands outstretched. A quick color rose into her cheeks; she trembled, but her gaze did not fall.

"Dorothy," he began, impetuously, "I have come to you. It was long waiting, but just as soon as I learned your whereabouts through 'Bill' Wittles' letter, I started. If it had been a thousand years earlier, I would have come on a charger, in full armor, and broken down all opposition. I would have liked that better. And I would have carried you off willy-nilly, in spite of all opposition—but with your consent, dear. Would—would I have had it?"

There was but an instant's hesitation; then her words came clear and distinct, "Yes, Page, I think you would."

"Oh Lordy, boy," came an expostulating voice from the other side of the tree, "you mustn't do that! 'Tain't right. An' you, Dorothy, you mustn't let him. Oh, dear me! don't you ever think of it, neither one nor tother o' you. You ain't of a kind, an' 'tain't right. I'd do anything on the whole footstool for you, Page, that's square; but you can see for yourself, boy, Dorothy, that this is an awful mistake. It can't be did. Dorothy's real; an' though you've got the savoor, an' can do the high amoosements, Page, you ain't 'them'—nothing can make you them." And Bill Wittles, his face convulsed with consternation and grief, came under the arch, and pushed his way between the two. "Don't you see, boy, Dorothy," he continued, wringing his hands imploringly, "that nothing good can ever come of it? I've been 'round, an' know. Oh, dear, dear! I do wish I'd never writ that letter! I do wish I'd never spoke to you in that car, Page. Honest Injun, I do, though I like you better'n anybody I ever met. Jest to think it's me that's brung all this mess to pass. An' such a mess! O-oh, Lor-dy!"

At first Page had looked annoyed; but at the sight of Wittles' genuine distress his annoyance changed quickly to amusement. Dorothy's eyes were dancing. At the last gasp of utter misery she shot a glance at Page, then raised her handkerchief hurriedly to her mouth. When she could steady her voice a little sh

said, but without daring another glance at Page, "You are very kind, Mr. Wittles, but I—I don't think you quite understand. I have known Mr. Withrow for some time—before we came to Florida. He is very popular in society, and is considered quite wealthy. It is nice of you to—to think of me in this way, and I appreciate it; but really you need have no misgivings concerning him. Mr. Withrow is regarded as quite an eligible young man, I believe, even by 'them.'"

Bill Wittles looked from one to the other, his mouth opening and shutting with slow, amazed comprehension. Suddenly he swung around, and took two quick, resolute strides to where the tree-trunk arched down to one side of the path. "Blamed old numbskull!" they heard him mutter, disgustedly. "Dumber'n a rootin' razorback, slower'n a sand-turkle. Take that for a sense-opener, an' that an' that!" and he pounded his head vigorously against the trunk. "Took Page for a fakir, did ye, an' a road-hitter?" Thwack! thwack! "Thought he was a card-sharp, an' wanted him to go in partnership on monkeys, an' to bunk in with you, an' tried to lend him money—him, a real swell. Oh, you old fool, you!" Thwack! thwack!

"Oh, Mr. Wittles! Please, please, Mr. Wittles!" cried Dorothy, between laughter and alarm. "Don't do that! Please, please, don't! You will hurt yourself!"

She caught him by the arm, and essayed to draw him away, but she might as well have tried to stir the tree-trunk.

"Hurt"—thwack—"this old block head of mine, Dorothy? Can't do it. The thing's too thick!" Thwack! thwack! "Been callin' him 'Page' right to his face, when it should 'a' been Mr. Withrow. Been scoldin' him like he was a little kid, an' me his daddy who'd been 'round an' seen things. Oh, Lordy!"

"There, there, Mr. Wittles; that will do," remonstrated Page. "I think the head is all right now. And after all, the mistake was natural. Wait a moment. I want to speak with you."

Wittles had turned dejectedly to walk away, but paused obediently. "Jest like you say, Page—Mr. Withrow," he said, humbly. "I didn't s'pose you'd ever speak to me ag'in, though I do hate for you to hold hard feelin's."

"I hold nothing but the very kindliest of feelings toward you, Wittles," returned Page, warmly; "rest assured of that."

Bill Wittles caught his breath a little; then the sloping shoulders straightened, the head rose, the entire man beamed. "That's the old Page all through," he yelled, delightedly. "I might 'a' knowed. Dear, dear, but ain't I tickled! Say, boy, shake! Shake every blame finger off if you can—I don't care," and seizing Page's hand, he swung it with such convulsive energy that even the trained athlete winced and drew back.

"There, that will do, Wittles," he said, hurriedly, "and thank you. Now, what I wish to speak about is the pineapple plantation. You have an ambition that way, I think."

"Sure, Page. Pineapples is to be my lay soon's I'm heeled. Monkey's ain't in it now."

"Good," said Page, heartily. "Now, I have just the right sort of place waiting for you, Wittles. All it lacks is a resident owner and manager. You had better go up at once, and take charge. I will have a clear deed made out in your name. No," as Wittles was about to speak, "don't thank me. It's all right, and no more than you would have done by me. But there is one little matter in connection with the plantation, Wittles, that I would like for you to undertake—out of disinterested friendship. You have been considerable of Mr. Thornton?"

Wittles grinned and nodded.

"Well," and Page's voice became serious, "I want you to take him in hand. Mr. Thornton will have to be helped right along, I'm afraid. You might give him a position as assistant manager or something. Make him feel that his work is responsible, and yet don't trust him with too much authority. Do you think you can manage it for me, Wittles?"

"Can I?" There was no bombast in Wittles' voice now. His lips were trembling, and two big tears were slipping unheeded down his cheeks. "Can I?" he repeated. "For you, Page? Why, boy, if 'twould be any good I'd cut off my fingers for you, an' then my toes. That's gospel. I was struck on you from the fust—you know that. An' 'twan't so much for the savoor that was stickin' on the outside as 'twas for the savoor down in. I've been 'round, an' seen folks, Page, an' though I didn't quite understand myself then, I had a feelin' that you was clean an' whole an'—an' savoor all through. That's what made me cotton to you. An' as for Thornton," earnestly, "if there's so much as a grain o' sand in him to build on, I'll bring it out, without any prop or mortgage. Him an' me will be netops, like him an' you was, an' here's my hand on it."

That evening there was a short consultation in Mrs. Spencer-Browne's room at Peacock's, which resulted in their return to Palm Beach the following day. Mrs. Payne and Page accompanied them to the Inn, and six days later Mr. Payne joined the party there.

One morning Page sought Dorothy with an open letter in his hand. "I wish your advice about this, dear," he said. "Some time ago I was asked to run for the highest office within the gift of one of our Western states. At the time I thought it was merely the effect of a sudden enthusiasm, and declined. Since then I have received quite a number of intimations that my decision would not be accepted as final. This letter urges me to reconsider, and to allow my name to be used at the next election. What shall I say?"

Dorothy's eyes were bright. "Consent, of course," she answered quickly. "There is nothing else you can do. Politics is the noblest field a man can enter. Oh, Page," one of her hands seeking his arm caressingly, "what a grand life it will be for us, to help shape the destiny of a great country like ours."

[THE END]

Free

The cold, blank winter day breaks ghastly on the plains of northern Russia. Gloomily onward stretch the wild, snow-covered steppes of frozen Siberia; not a tree, not a bush, in sight; and the winds rise, blowing with fury, and whirling heaps of snow around and around in the air. On the frozen ground two men are lying huddled together, trying to hide themselves from the blast, struggling against the deadly frost which creeps upon them, slowly paralyzing their limbs.

They escaped from the party of exiles. How they were hunted! How, like wild beasts, they were pursued! But the merciless work in the cold, subterranean mines of Siberia stood before them. Thinking of it, they ran, breathlessly ran, leaving their pursuers behind. . . . And now they lie on the snow, with knees bruised and bleeding, with hands scarred and swollen, staring wildly before them on the raw, cold morning breaking in the east.

On their faces, which show intelligence and resolution, is visible the impression of the tyrannic government which persecutes them as political "criminals." Their features are pinched, the teeth set close together, and a steady fire burns in their eyes which tells of mortal hatred to those despots who stifle every voice that is raised against their unjust rule. Their long kaftans are tied with ropes around the waist, and their faces are muffled in ragged shawls to protect them from the smarting wind. They had no time to provide themselves with proper clothing; in the dead of night they were suddenly caught and transported—but they escaped, and now they are free! All alone on the wild plains, free! How good! and how warm! . . . They feel the cold no longer. . . . Their features relax, grow softer, and their eyes become glassy, slowly filling with tears, as dim thoughts of home and native scenes pass faintly through the brain. . . . Their eyes close, they embrace each other closer and closer, feeling so warm. . . . And around them the dreary steppes stretch endlessly on and on to meet a leaden sky that hangs gloomily overhead. The bitter morning breaks on the infinite solitude, and the snow, falling, falling, falling, snugly covers the sleeping pair, making them warmer and warmer.—Benjamin Rosenblatt, in The Outlook.

Reproached

"Yes, it is nearly five months."

As she spoke these words in somewhat severe tones, and with reproachful gaze, the wife of the young and enthusiastic explorer drew around her her polar-bear tippet, and sank back on the ice-berg that she called home, with a sigh of disapproval. Beyond them, on every side, stretched the illimitable waste of ice and snow. Only the barking of the pack-dogs broke the awful stillness.

"But, my dear," pleaded the husband, "you must remember that I have been detained at the pole on the most urgent business. What did you expect, anyway?"

"I expected," she replied, as haughtily as the thermometer permitted, "that you might be gone a month or two, but I didn't think you would stay out all night!"—Ainslee's.

Interesting Items

The last census gave the value of poultry raised in the United States during the year 1899 as $136,891,877; of eggs produced in the same year, $144,286,158.

The largest loaves of bread baked in the world are those of France and Italy. The "pipe" bread of Italy is baked in loaves two or three feet long, while in France the loaves are made in the shape of very long rolls, four or five feet in length, and in many cases even six feet. —Woman's Magazine.

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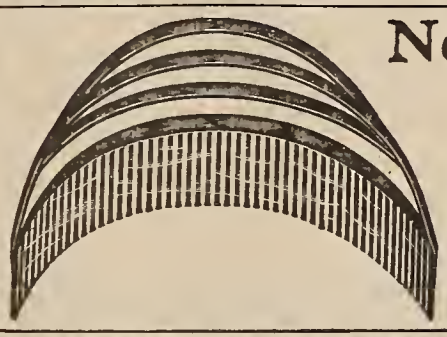

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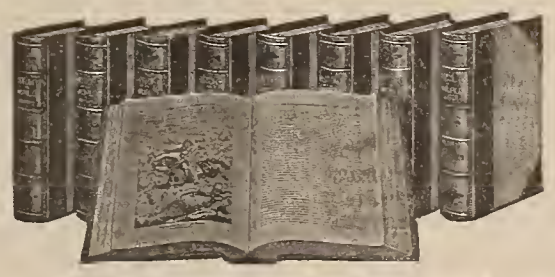

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The Young People

A Stately Courtship

A youth there was who loved a Miss.,
For she was very fair, I Wis.

So one day in a sylvan Del.
He sought his ardent love to tell.

Quoth he, "I'm but a poor Md.,
While you are far too good for Me.

"And yet of love I dare to speak
Who scarcely can earn Tenn. a week.

"While you, alas! I must remark,
Trace your descent back to the Ark."

The maiden blushed, and murmured, "La!
I think you'd better ask my Pa."

Before papa he waited on
The youth a careful speech did Conn.

But papa crushed his hopes, in truth,
"Don't get too Ga., my forward youth."

Yet love at locksmiths laugh, they say:
The youth and maiden fled away.

Unto the nearest parson hied,
Where fast the nuptial knot was tied.

And now they live as loving mates
In "one of the United States."

How Dannie Court-Martialed the Cat

"You just ought to have been at school, mama! We sang 'America' so we pretty near yelled, and we had 'Old Glory' draped about George Washington's picture up in front, and— Oh, say, us boys are going up on Downer's hill to slide!" Arthur tossed down his books, and dashed out of the house again.

Dannie had been letting the cat tangle up the reins about the chair-leg while he listened. Now he asked, "Where does George Washington live, mama?"

"George Washington lived more than a hundred years ago, dear. He was a good man and a brave soldier, and did much for his country. We love him for it, and remember when his birthday comes. That is his picture, you know, in the library."

"Oh, yes, I 'member. It's Washin'ton crossin' the Del'ware Ocean."

Dannie untangled the reins. "Sylvester," he said to the cat, "we're not goin' to play horse any more, 'cause you get the reins so dreffly snarled. We're goin' to play George Washin'ton. Now, what'll we have for a boat? Oh, I know!"

Down the stairs he clattered, with Sylvester tucked under his arm, the cat's two white hind feet scraping along from stair to stair. Through the kitchen, down the basement stairs and into the laundry they scurried.

"Now, Sylvester, here's the clothes-baxit. It'll make a nexlent boat. I'll be George Washin'ton an' stand up here in front, an' you'll be a common soldier an' sit still and row."

Dannie placed the cat in one end of the basket; but Sylvester refused to sit down, so he had to be allowed to stand up. Dannie folded his arms across his chest, and stood very erect. While he was looking straight ahead, the soldier behind leaped lightly out of the boat and ran away.

"Oh, dear, dear! You mustn't do that way, Sylvester! Come back into the boat, sir, or you will get drownded dead!"

But the "common soldier" refused to obey, and "George Washington" had to scramble out and bring him back.

No sooner were they fairly afloat once more on the "Del'ware Ocean" than Sylvester sprang out of the basket again, and dashed away into the store-room. Again the General chased after his four-footed soldier, and captured him.

"Sylvester," he said, gravely, "you are not a 'bedient soldier. You must be s'verely punished. I am stremely sorry to have to—to—corn-marshal you.

"I'm not zackly sure what corn-marshal is," he said to himself, "but I guess it's when they put soldiers in prison.

"Yes, Sylvester, I am goin' to corn-marshal you in the dark prison."

Opening the door of the fruit-closet a little way, he poked the cat in, and shutting the door tightly, stood with his back against it. Just then he heard Tilly calling, "Dannie! Dannie! I tink you don't come quick you lose your supper!"

So Dannie hurried up-stairs. He felt "sneaky" over going off and leaving Sylvester in the closet, but he said to himself, "I'll let him out right after supper. He hasn't been punished long 'nough yet."

And he really meant to do it. But, dear me, right after supper papa told stories, and while he stayed to listen "just a minute" the sandman came along, and then when Dannie didn't know a thing about it at all Tilly carried him up-stairs and undressed him and put him to bed. When he woke he was all alone, with the light turned low, and it was very still. Was it night? It surely was, and they had put him to bed, and Sylvester—oh, poor Sylvester!—was still shut up in the dark closet down in the dark basement. Dannie's heart began to thump hard at the thought. Twice he called mama, and once he called papa, and then Arthur, but no one answered, for they were all down-stairs in the parlor. Dannie grew more and more anxious and heartsick. Nobody would ever come. Nobody but one little boy knew that poor Sylvester was a prisoner. There was no way then but for Dannie himself to go down into the dark basement and open the door of the dark closet. But how could he ever find the way down? And if he could, how could he ever find the way back? He might get lost in the basement, and have to stay down there until morning. Dreadful thought! Then he remembered about George Washington, the brave soldier. Was it brave to be afraid of the dark? Would the real George Washington have been afraid if it had been his cat in his dark closet in his dark basement?

"Course he wouldn't," whispered Dannie to himself. "'Sides, it's silly to be 'fraid of the dark!"

So the little General slipped out of bed. His bare feet made no noise on the stairs, and lightly they pattered over the kitchen floor. No one heard the basement door as Dannie stood on tiptoe and turned the knob. With wide eyes he felt his way down the dark stairs and over toward the fruit-closet. He didn't find it the first thing. No, the first thing he found was a bump on the nose. That was when he ran into the clothes-rack. Next he tumbled into the clothes-basket. He would have cried that time, but just as he picked himself up he heard a faint "mew," which made his heart jump with gladness. The next moment he was tugging at the latch of the fruit-closet. When the door came open, something furry brushed against him, and Dannie gathered up the prisoner tenderly in his arms.

It was very easy, after all, to find the way back, for a dim light in the kitchen showed him the doorway at the top of the basement stairs. Coming out of the parlor just then, mama saw a little figure in nightgown trudging up the hall stairs hugging tightly the great maltese.

"Why, Dannie, what are you doing up at this time, and where are you taking kitty?"

"I went after Sylvester. He was all alone down there. I corn-marshaled him in the fruit-closet, and he couldn't get out."

"What are you saying, dear?" Mama looked puzzled.

"I put Sylvester in prison 'cause he wouldn't be 'bedient. Wasn't that a corn-marshal?"

"Not exactly, dear. The court-martial is a trial to find out if the soldier has done wrong. I am afraid that poor Sylvester got more punishment than was right, but I am glad my little George Washington was brave enough to go to his rescue."

Mama tucked Dannie in bed again, and before Sylvester had finished his supper in the kitchen the little boy was asleep and dreaming that he was himself being court-martialed before a crowd of maltese cats. JOSEPHINE E. TOAL.

A SNAP BEFORE A NAP

He Wanted to Enter There

A little boy who had been blowing bubbles all the morning, tiring of play, and suddenly growing serious, said, "Read me that thtory about heaven; it ith tho gloriouth."

"I will," said the mother; "but did you take the soap out of the water?"

"Oh, yeth; I'm thure I did."

The mother read the description of the beautiful city, the streets of gold, the gates of pearl. He listened with delight; but when she came to the words, "No one can enter there who loveth or maketh a lie," bounding up, he said, "I gueth I'll go and thee about that thoap!"—Northwestern Monthly.

Emerson and the Boys

The hero-worshiper is subject to various disappointments. He meets the object of his admiration to find him, perhaps, cold and unresponsive, or, worst of all, commonplace. The saying is a common one that no man is a hero to his valet, although that depends as much on the valet as on the hero. But one great man who could never have been disappointing was Ralph Waldo Emerson. He carried in his face and manner the sweetness and dignity which belong to his work.

No ideal formed of him in absence could have received the slightest jar from his actual personality. An old Harvard "boy" says that he and some of the other fellows of his time were one day congregated in the room of a student who was a relative of Emerson. They were talking, laughing, singing. There came a knock at the door.

"Come in!" called one. No one appeared, but the knock was repeated.

"Oh, come in!" yelled the host, and the other men reinforced the invitation with cries and catcalls; but still no one came.

Again they heard the knock, and this time a chorus of abuse saluted it. The host marched to the door, and flung it open. There stood Ralph Waldo Emerson, smiling benignantly, "with the face of sage and angel."

Instantly the boys rose to their feet. They "lined up" at the side of the room, and when he had entered they noiselessly slipped away. That sweet presence had created its own atmosphere. —Youth's Companion.

How Robert Helped to Capture a Leopard

A TRUE STORY

When Robert, who was only nine years old, saw his mama, Aunt Alice, Dolly Dimple and Sister Margie drive away together to see the street-fair, he felt very lonely, even if Martha Bently had promised that he could go in the evening with papa and see the trained sea-lions and the animal-show.

Robert lived in a quiet neighborhood, where there was "nothing ever to see," he complained, as he turned to enter the house.

Just then his best friend, Jimmie Fenton, came running, waving his cap. He was greatly excited, and called out, "What do you think, Robert? Two of the leopards got away from the animal-show, and the police are out hunting for them! Get your cap, quick; let's go with them, and have some fun!"

Robert was strongly tempted to go; but he remembered he had promised his mama not to leave the house during her absence. Jimmy urged him to go, but he refused to do so.

Jimmie finally lost his temper, and called him a "'traid cat" and a "baby," and ran off, leaving poor Robert feeling more lonely than ever, and if he had not been such a big boy he would have cried.

The house seemed very quiet without his sisters. He could think of nothing to do to amuse himself. He went to the kitchen and talked a while with Helga, the pleasant-tempered Norwegian girl, who was making cookies. He read some in his new book, and was wondering what to do next, when he heard a soft "pit-pat" up the stone steps. He ran to the front hall, and peeped through the glass door. There lay a huge leopard on the mat on the veranda, calmly resting his nose on his paws. Robert was very much frightened; but it occurred to him that he must do something at once, for his mama, auntie and sisters might drive up to the house at any time. The leopard seemed tired after his long tramp, and stretched himself out contentedly as if for a sleep.

Robert remembered the police were out hunting the leopards; so he telephoned to the police station.

In a very short time the trainer of the animals with a great iron cage, and several policemen with guns and pistols, arrived. They fired their guns off several times, and the poor leopard was so frightened that the keeper got him into his cage with little trouble.

The noise soon drew a crowd of people, among them Jimmie, who had followed the police all afternoon, and did not even get to see the animal, as they had driven off before he arrived.

The people asked Robert a great many questions, and he was praised for acting so promptly. He felt well paid for obeying his mama. A few days later he was very happy, for he received a fine new bicycle from the man who owned the leopard he had helped to capture.—Margaret Allison, in Western Christian Advocate.

Three Boys

"Watch that boy, now," said Phil.

"Which boy?" said Ned.

"That boy who was at play with us down on the sand. His name is Will. He knows how to look out for himself, doesn't he?"

Phil and Ned with their parents, had been spending some time at the seaside. Will was a boy who had come to pass the evening in the parlor of the boarding-house. Here it was that Phil and Ned saw him first.

First he had hunted out a very large easy-chair, and was tugging at it to get it to the table.

"There! He's got it squared around just to suit him," laughed Ned.

"Now he's moving the lamp nearer to it," said Phil.

"Well, if I ever. If he isn't putting a footstool before it. I suppose he is all ready to enjoy it."

It was plain that Will was. With a pleased look he gazed around the room until he caught sight of a lady who was standing. He darted toward her, and said, "Come, mother, I have a nice place for you."

He led her to the chair, and settled the stool at her feet as she sat down.

Phil and Ned looked a little foolish.

Presently Phil sprang out of his chair as his mother came near.

"Mother, take my chair," he said.

Ned stepped quickly to pick up a handkerchief which a lady had dropped, and returned it with a bow.

They are wise boys who profit by a graceful lesson given by a true gentleman.—The Watchman.

Cold Weather

Six-year-old Paul came from school one cold winter day with the buttons off his coat and told his mama she would have to get to work and sew buttons, as they had "froze" off. C. E.

Sunday Reading

Tell Him So!

If you hear a kind word spoken
Of some worthy soul you know,
It may fill his heart with sunshine
If you only tell him so.

If a deed, however humble,
Helps you on your way to go,
Seek the one whose hand has helped you,
Seek him out, and tell him so!

If your heart is touched and tender
Toward a sinner, howe'er low,
It might help him to do better
If you'd only tell him so!

Oh my sisters, oh my brothers,
As o'er life's rough path you go.
If God's love has saved and kept you,
Do not fail to tell men so!

L. K. W.

A Thought Passed On

My friend Mrs. Hazel rustled into my room one evening gowned in a beautiful light silk, all flounces and ribbons and lace, with a lovely chiffon-and-flower creation resting on her shapely head, and all the accessories of a full-dress toilet. She had been running in during my illness in her morning-gown, her shopping-dress or her bicycle-suit, and as my eyes drank in the charming "tout ensemble," and freely expressed admiration with all the privilege of a dear friend, she leaned over my bed, gave me a merry little shaking, and said, before I could inquire what it was all about, "It is just for you alone, you dreadful little reprobate—lying here these six weeks, and never getting up once to see what the world is doing! I am afraid if I don't bring in a little frivolity you will be getting entirely too good for the rest of us poor mortals."

So she rattled on, doing me more good than pills, powders or liquids. I almost felt that I could put on my own best gown and fixings. It is wonderful what a little good cheer will do for us sometimes in the long days of convalescence.

When she started to go I said, "Tell me, how did you ever come to do it? You have never been sick any. How did you know that a sight of all this lovely toggery was just what I needed?"

"Well," she said, "I see you are not to be hoodwinked into believing that this brilliant therapeutic idea originated in my poor brain, so I may as well confess it did not. I was dressed one evening for a reception when Mrs. Waters came to the door. She exclaimed at once in her delightful way, 'Oh, do go to see some one who is sick—just for a minute or two before the reception!'

"'I stared my surprise, and then exclaimed, 'Go to see some one who is sick!'

"'Yes,' she said. 'It will do them a world of good—some woman, I mean. Of course, you can do nothing with men, we just have to bear with them until they get up and out when they are sick, but a woman—why, you can do wonders for her by running in and rustling silk and lace and flowers around her bedside. Just try it once.'

"The idea impressed me. I made a visit at once to a sick friend, and was so pleased with the result that I have made a practice ever since of dressing a little early for every social affair, and visiting some sick person. I find it does them all good — women, children, and even the men.

"Since you have been sick I've watched and hoped for a social occasion, but there seems to be a social drought, so I dressed just for you, madam, for I can't have you in bed any longer, and this is all you need to lift you right up."

When she had gone I lay there quietly enjoying it all still, and many pleasant thoughts came rapidly trooping in from the far-away past. I remembered being ill once on the night of a party which had consumed the interest of "our circle" of young people for weeks past. Such a disappointment it was! As the hour drew near I was lying there in gloomy silence, when suddenly the door quietly opened, and in flitted softly a little figure with airy muslin gown and floating ribbons. She laid her finger on her lips, whirled lightly around the bed just once and disappeared. Then another tripped in, and another, and another, until all my intimate girl friends in their lovely evening-gowns had danced around my bed like a succession of noiseless but beautiful butterflies. And I really felt almost as happy as if I had been to the party, too, thanks to my thoughtful friends.

So I pass the little thought along, especially for the girls. If you know any one ill—and be sure to always keep some of the great invalid tribe on your list—make them calls when you have on your prettiest things. If to dainty gowns and furbelows are added the freshness and vivacity of youth—divine gifts held only for a brief, brief time — what life and cheer may be carried to the weary, suffering ones of earth!

And according to the beautiful law of compensation, when we do most for others, we are unconsciously doing the most for ourselves.

It is the little things of life that count in the long run, anyway—the word of sympathy spoken just at the right time to the sorrowing, the word of encouragement to the discouraged one who feels that there is no use trying to fight the battles of life any longer. Cultivate sympathy; in other words, not only head, but heart; yes, covet it as you would a priceless jewel, and remember that "a word fitly spoken is like apples of gold in pictures of silver."—Isla May Mullins.

A Remedy for Discontent

There is only one remedy for discontent, and that is service. Some years ago we had a letter from a very dear friend who, although possessed of abundant means, was singularly without family ties and sorrowfully conscious of the failure of her most cherished purpose in life. Like many others, she had sought Paris as the one city where "on s'amuse," where the aim of existence is entertainment and the refuge from memory is distraction. Taking handsome apartments at Auteuil, she had, by virtue of her social position at home, the entrée to the best American and English circles in the city. Familiar with Paris from her girlhood, she could not feel herself in exile. Literally "the world was all before her where to choose." She flitted from foyer to foyer, from salon to salon. She sought in the Luxembourg, the Louvre and at Versailles to reawaken her earlier enthusiasms in art. She determined, like the writer of Ecclesiastes, to acquaint herself with mirth while not forsaking wisdom; and still driven by vain regrets, she sought the places of light comedies and farces. And at last, weary and heart-sick and despondent, she sat down and wrote that she was the freest woman in Paris—and the most wretched; she was surfeited with pleasure, yet sinking deeper into despondency every day. "What more can I do than I have done? What more can I seek that I have not sought? And lo! all is vanity and vexation of spirit." Life had become but a mere Punch and Judy show upon the Champs Elysées; at its best it could only afford forgetfulness for a brief moment, then returned the sigh.

It was a desperate case, as we acknowledged to her in reply, because what an affluent fortune could not assuage, twice that fortune could not cure. Music may at first soothe, but presently, when it does not heal, it exasperates, and the Saul who now listens charmed to David's art soon hurls at him the deadly javelin. The world may relieve ennui for a moment, but we sink more deeply when the relief gives way. But, desperate as the case is, there is one way leading back to happiness; and that is the path along which his feet passed who "went about doing good."

We wrote to our friend, knowing how thoroughly she was desirous of finding content, and knowing that our words would not be treated lightly, that the path to peace lay not through the Bois de Boulogne, but out toward Belleville. She would find the Pearl of Great Price not where the goldsmith's shops were clustered along the Rue de la Paix, but far away beyond the Jardin des Plantes. She had been frequenting the chateaux; happiness would be found in the cabanes, the hovels of the poor.

The sequel of it was that this daughter of fortune put forth the touch of kindliness and was herself healed. She gave herself, and freely from her abundance, to the ministries for which in any great city there is such constant need; and presently wrote, with overflowing heart that a new sunshine was upon her way—the benediction of the poor! The eye that saw her blessed her, and the ear that heard her offered a prayer for her happiness. Never had she been so happy; and we are glad to say, the charities she set in motion are continued in uninterrupted benefactions to this day.—The Interior.

Treasures

Mind has no sex, and woman cannot be made too frequently acquainted with this when their own estimate sinks.

Many a true heart that would have come back like the dove from the ark, after the first transgression, has been frightened beyond recall by the angry look and menace and taunt, the savage charity of an unforgiving soul.—McCall's.

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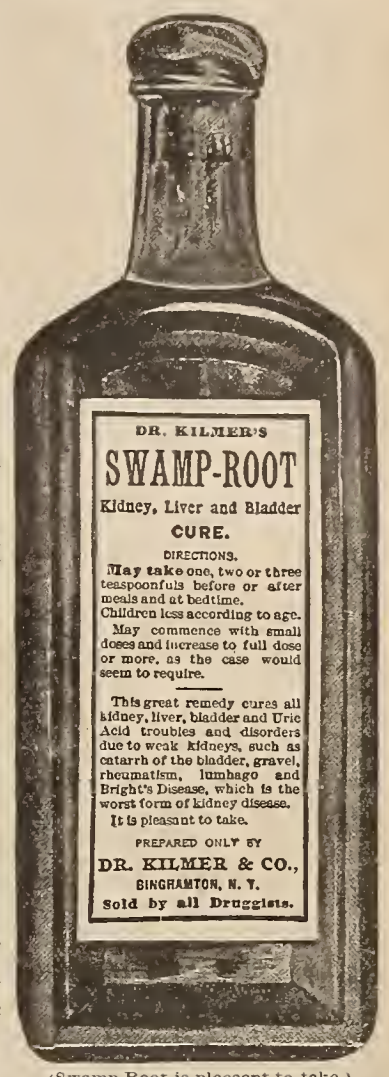
If you are sick or "feel badly," begin taking the great kidney remedy, Dr. Kilmer's Swamp-Root, because as soon as your kidneys are getting better they will help all the other organs to health. A trial will convince any one.



(Swamp-Root is pleasant to take.)

Didn't Know I Had Kidney Trouble

I had tried so many remedies without their having benefited me that I was about discouraged; but in a few days after taking your wonderful Swamp-Root I began to feel better.

I was out of health and run down generally; had no appetite; was dizzy and suffered with headache most of the time. I did not know that my kidneys were the cause of my trouble, but somehow felt they might be, and I began taking Swamp-Root, as above stated. There is such a pleasant taste to Swamp-Root, and it goes right to the spot and drives disease out of the system. It has cured me, and I cheerfully recommend it to all sufferers.

Gratefully yours,
Mrs. A. L. Walker,
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The cure for these troubles is Dr. Kilmer's Swamp-Root, the world-famous kidney remedy. In taking Swamp-Root you afford natural help to Nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that has ever been discovered.

How to Find Out

If there is any doubt in your mind as to your condition, take from your urine on rising about four ounces, place it in a glass or bottle, and let it stand twenty-four hours. If on examination it is milky or cloudy, if there is a brick-dust settling, or if small particles float about in it, your kidneys are in need of immediate attention.

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SPECIAL NOTICE.—So successful is Swamp-Root in promptly curing even the most distressing cases, that to prove its wonderful merits you may have a sample bottle and a book of valuable information, both sent absolutely free by mail. The book contains many of the thousands upon thousands of testimonial letters received from men and women cured. The value and success of Swamp-Root is so well known that our readers are advised to send for a sample bottle.

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Wages of Child

E. E. L., Illinois, asks: "Can a son collect wages from his father for work that he (the son) has done, there being no mention of wages at the time? I have worked nine years after I was twenty-one years old, and have received no money. Can I put in my bill when he is alive or after his death?"

No. If you want to collect anything, you must have your father allow your claim while he is alive. When a child works for his father, he is presumed to do it for nothing.

Inheritance in Wisconsin

R. C. H., Wisconsin, asks: "If a man dies in Wisconsin, leaving no children and without making a will, what part would his widow receive? Would his parents or brothers be entitled to any of either the real or personal property? If the wife dies first, what is done with the property?"

The widow would get one third of the property. If there be no widow, it would go to the parents; and if no parents, to the brothers and sisters.

Rights of Adopted Child

W. B. O., Iowa, inquires: "In the state of Iowa a husband and his wife own one hundred and eighty acres of land. Their child died when in babyhood, and they have adopted a little child. Will it inherit said property the same as if it was their own child? Can the parents, brothers or sisters of the man or his wife lay claim to any of the property if either or both should die?"

Yes, if the child was legally adopted, it would inherit all the property the same as a natural child.

Right of Surviving Executor to Settle Estate

C. R., New York, asks: "There were two executors to settle an estate, and one died. Can the other executor finish the settlement? The surviving executor has done all the business so far, but there is still some land to be sold according to the provisions of the will."

It is a rule of law that where there are two executors either of them can do any act required to settle the estate, and I have no doubt but that a surviving executor can settle up the estate unless there is some special provision of the will to the contrary.

Rights of a Road

W. T. B., Ohio, asks: "Fifteen years ago A. bought land from B. Said land did not join the highway, but joins a farm rented and operated by A. At the time of purchase, and until recently, nothing has been said about right of way, A. getting access to the land from the rented place. A. no longer rents the adjoining place, and now wishes to get a road to his land. B. still owns land between this parcel and the highway. Can A. compel B. to give him a right of way?"

Petition the township trustees for a road. See forms in "Rockel's Guide for Township Officers," which is owned by most trustees.

Digging Soil Away from Adjoining Land

W. E. St. J., Ohio, makes an inquiry which is too long to print entirely, but in substance is: "On the back part of my lot is a ridge of gravel. My neighbor on the other side of my land is selling his gravel, and he has dug right up to my posts, and the land is falling in and the posts and fence coming down. I want to know what I should do."

Well, your neighbor has no right to dig so close to your land that the fence will give way or the land cave in. One landowner has the right to have his land supported by the adjoining land in the way that Nature put it, and no adjoining landowner has a right to dig away his soil or gravel in such proximity to his neighbor's land that the soil will cave in. If your neighbor has done so, he is liable, and you can sue him and recover damages for the injury sustained.

Railroad Taking Land for Its Own Use

W. J. H., says: "I own a house and lot in town, through which it is proposed to run a railroad. I desire to know if the company can take same and pay me its assessable value. In case of disagreement as to value, how would the consideration be fixed? If by appraisers, should the fact of its being my home influence their decision?"

When a railroad or other public corporation desires to establish its right of way, and it cannot be acquired by agreement with the owner, it must file a petition in the court to have such right of way condemned, and the value of the same is fixed by a jury. The mere fact that the land is your home would not influence the amount that should be paid, but its value should be ascertained in the same manner that the value of land is generally ascertained. The company is bound to pay you its full fair value before the law will allow it to take the same. The assessed value of the property will have nothing to do with its general value.

Power to Will Away Property

R. G., Michigan, writes: "A father has a farm, and wants A. to have it. B. has worked the farm for three years after becoming of age. B. buys out the shares of A. and the rest of the heirs, and the mother signs off her share to B. Can B. keep the place if his father wills it to A.?"

There is an adage of the law that there can be no heir to the living, consequently the deed of A., made during his father's lifetime, would convey nothing. While this is true, however, if A. should convey the same by warranty deed, and afterward come into ownership of the property, A. would be precluded from claiming ownership, he being estopped by his own act; that is, having sold something that he did not own, he could not claim the same if afterward he did own it.

Rights as to Certain Personal Property

S. K., Illinois, says: "I had some personal property, and mortgaged it to a machine company. I could not pay the debt, so I turned part of the property over to a friend who was security, to sell, and pay the mortgage. He took possession of all my property except one machine, which he never touched. He still claims that I owe him. I have books, and so has he, but I don't think they agree. He kept the property, and sold it, or sacrificed it, at private sale, and received from one fourth to one half of what it was worth. I claim that he owes me in the transaction. The mortgage was not foreclosed. He claims this piece of machinery, and so do I. It does not stand on his land, nor on mine, but on another man's land. The mortgage has been due over a year. To whom does the machine belong?"

Such questions as the above are always very difficult to answer, as so much depends on the facts in dispute—for instance, whether the machine was sold for the best price; whether the parties owe each other, and on which side the debt lies; whether it was really turned over to B. Generally, I would say that A. would retain the right to the property, unless claimed by the machine company under their mortgage. Then B. would have to go into court and claim the right to be subrogated to the right of the machine company by reason of having paid the debt.

Interesting Facts

Nearly all the royal families of Europe employ American dentists.

The first life-insurance society was started in London in 1698, and another in 1700. Neither was successful.

Permanent salvage corps to render aid in cases of accident are about to be organized by the Swiss Alpine clubs.

The output of Lake Superior copper for March exceeded seventeen million pounds, a record for a single month.

Pennsylvania has a larger number of persons of negro descent in its population than any other of the Northern states.

The Liverpool docks, one of the wonders of modern commerce, extend along the Mersey a distance of six and one half miles.

Australia and New Zealand have ninety and one half million sheep, which is just one and one half times as many as the whole of the United States possesses.

Perhaps the most remarkable bridges in the world are the kettle bridges used in Russia and Siberia, of which Cossack soldiers are expert builders. They are built up of the soldiers' lances and cooking-kettles. Seven or eight lances are placed under the handles of a number of kettles, and fastened by means of ropes to form a raft. Each of these rafts will bear the weight of half a ton.—Woman's Magazine.

AN ELEGANT REPRODUCTION OF A

Magnificent Painting

FREE to any one sending TWO yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents each

This handsome picture is reproduced in ten colors and gold, and all the tints and colorings of the original painting are carefully preserved and brought out.

The illustration here can give but a meager idea of the charming beauty of the picture. It must be seen to be appreciated. IT IS FRESH FROM THE ARTIST'S BRUSH, AND NEVER BEFORE OFFERED TO THE PUBLIC, so that the Farm and Fireside readers have the first opportunity to secure a copy.

Reduced Illustration Size, 20 by 30 Inches

A LARGE GOLD FRAME If you will notice the illustration you will see that the artist has displayed more than the usual amount of genius. He has painted a wide gilt border, in exact imitation of a gold frame, so that a *frame is not needed*. It has the full appearance of a handsome gold frame three inches in width. All that is necessary is to fasten the four corners to the wall with pins, and it will have the full effect of a magnificent picture in a heavy gold frame. It is quite proper at the present time to hang works of art without frames. However, this picture can be framed if you so desire.

SIZE The size of this magnificent new work of art is about 20 by 30 inches, which makes a large and elegant wall-decoration. The cut on this page is greatly reduced in size.

TEN COLORS The colors and tints, the lights and shadows that the artist uses in his make-up of this work of art create one of the most striking and exquisite pictures of its kind that we have ever seen. The artist has employed no less than ten of the most delicate and beautiful colors and gold in his creation of this charming work of art.

THE SUBJECT of this exquisite painting is that of a beautiful young woman wearing a gorgeous heavy lace-over-silk dress, making one of the prettiest and most expensive gowns ever produced. In her hair she wears a diamond crescent, and about her neck a costly pearl-and-diamond necklace. She is standing among beautiful chrysanthemums, which tend to produce a most delicate and pleasing effect. Altogether it is one of the most beautiful paintings of its kind ever produced, and we are sure that all who receive it will be more than pleased with it.

The picture was painted especially for us, and we feel sure that our efforts to please our patrons will be appreciated. **Order as No. 54.**

One of these handsome pictures, and Farm and Fireside one year, will be sent to any address for only 40 cents.

Address FARM AND FIRESIDE, Springfield, Ohio

Farm Selections

News-Notes

IN GERMANY the preservation of the forests is considered to be a matter of great importance for both health and wealth.

A walnut-grower in Anaheim, Cal., who used lime freely in his orchards, secured a yield of a ton to the acre from his trees.

The returns from the chief of the Bureau of Statistics of the United States Department of Agriculture indicate that the acreage seeded to winter wheat is about thirty-two million acres, a decrease of six per cent as compared with the acreage seeded in the fall of 1902.

The Pennsylvania Railroad Company has completed the setting of fifty thousand young locust-trees, for railroad-ties, near Conewago Station, Pa. One million trees are to be set during the next four years. The rough places on many farms could be profitably utilized by planting the locust for fence-posts and ties.

Owing to the thoughtful consideration of the faculty of the University of Illinois, the creamerymen and butter-makers of that state have been granted the services of Professor Lee, a scientific, practical butter-maker, who is to visit, inspect and advise with the owners of creameries and with progressive butter-makers, and aid them in putting their butter-factories in proper sanitary condition.

Those who are fortunate enough to visit the city of Washington admire the handsomely kept lawns and the beautiful beds of flowers. Each fall the flower-beds are heavily manured with well-rotted stable manure, and are then deeply spaded, and thus remain until the coming of spring. In this way the soil is so improved that the best results are obtained.

Not until the present season have the exports of summer apples become a prominent feature in the export trade. The experiments made under the direction of the Secretary of Agriculture have been the immediate cause. Boston and New York are the principal apple-exporting cities. About one fifth of the apples exported to Great Britain come by rail from California. The Newton pippin is the most popular apple for export. The English trade prefers an apple of green color, while the red apple is the most popular in Germany, and the russet is the most popular variety in France. * * *

Catalogues Received

Cole's Seed Store, Pella, Iowa. Cole's garden annual.

W. F. Allen, Salisbury, Md. Allen's illustrated strawberry catalogue.

Racine Hatcher Company, Racine, Wis. "A Book About Incubators."

Anna L. Pinkerton Company, Hastings, Neb. Catalogue of "Chick Food."

S. M. Isbell & Co., Jackson, Mich. Illustrated catalogue of farm and garden seeds.

Phoenix Nursery Company, Bloomington, Ill. Catalogue of hardy trees and plants.

Arthur G. Alridge, Fishers, N. Y. Circular of choice Northern-grown seed-potatoes.

J. G. Harrison & Sons, Berlin, Md. Special list of peach, pear, apple and plum trees.

Zimmerman Seed Company, Topeka, Kan. Catalogue of garden, field and flower seeds.

Forrest Seed Company, Cortland, N. Y. Catalogue of field, vegetable and flower seeds.

L. L. Olds Seed Company, Clinton, Wis. Illustrated catalogue of farm, vegetable and flower seeds.

M. Crawford Company, Cuyahoga Falls, Ohio. Catalogue of strawberry-plants and gladiolus-bulbs.

L. M. Brandt & Son, Huntsville, Ohio. Descriptive catalogue of nursery stock and ground-mole trap.

Clay Phelps Incubator Company, Cincinnati, Ohio. Catalogue of the All Right incubators and brooders.

Iowa Incubator Company, Des Moines, Iowa. Illustrated catalogue of the Iowa hot-air incubators and brooders.

Harry N. Hammond Seed Company, Bay City, Mich. Catalogue of farm, garden and flower seeds. Seed-potatoes a specialty.

Wm. Henry Maule, Philadelphia, Pa. "The Maule Seed Book for 1904," listing everything desirable in seeds, plants, small fruits, bulbs, etc.

We Make What We Sell & Sell What We Make

We do not run a catalogue house. We manufacture buggies and sell them—all of them—direct from our factory to the user. No agent or retail dealer can get them unless he buys from us at the price you pay. For 1904 we are supplying the world of buggy users with a special bargain in both price and quality, a buggy that has **100 POINTS OF MERIT**

We Make To Your Order a **Split Hickory Special Top Buggy For Only $50**

The finest vehicle we ever turned out of our immense plant the equal of any for which others ask $75 and more. To prove all our claims for the 1904 Split Hickory Special, we propose to ship you one on

30 Days Free Trial

Hitch up to it, examine it, note the 100 points of merit, then decide, after 30 days, whether you keep or return it.

Send for our FREE 136-Page Catalog of Split Hickory Vehicles and Harness.

A Two Years' Iron-Clad GUARANTEE goes with every Split Hickory Special for 1904, a guarantee that protects you absolutely. We cannot give full specifications here of the way this buggy is furnished regularly. It has over **100 Points of Merit** and many special, desirable features not found on any other buggy on the market. Below we give a few of them.

Split Hickory second growth wheels with screws through the rims to prevent splitting; ¾ inch round edge steel tires set hot, long distance, dust proof axles with cemented axle beds, two more clips on the axles than are furnished on other buggies, oil tempered, graded and graduated springs, choice of wooden spring bar or Bailey body loop, 16 oz. imported all wool broadcloth upholstering, open bottom spring cushion, solid panel spring back, water-proof top with genuine No. 1 enameled leather quarters and back stays, back stays padded and stitched, all wool headlining, 28 oz. Fairfield rubber roof and back curtain, back curtain lined and reinforced, four roll up straps, rubber side curtains, full length velvet carpet, panel carpets and toe carpet, padded, patent leather 13 inch dash, longitudinal center spring, board boot on back of body, quick shifting shaft couplings, 16 coats of paint, oil and lead foundation, all wood work carried 100 days in pure oil and lead before priming. We furnish this buggy with any color gear wanted, with the body plain or fancy stripe, with three or four bow top, high or low wheels, arched or dropped axles, wide or narrow body, different design of upholstering in cushion and back, in fact, can make any reasonable changes that may be desired, finishing the buggy to order, shipping promptly and guaranteeing perfect satisfaction.

Write for our Catalog today. It will post you on how to buy a good buggy at a price that will guarantee you your money's worth.

NOTE—We manufacture a full line of high grade Harness, sold direct to user at wholesale prices.

THE OHIO CARRIAGE MANUFACTURING CO. (H. C. Phelps, President), 3116 Sixth St., Cincinnati, O.

Buys this and spring buggy as shown above with top, back and side curtains, shafts, anti-rattlers, wrench, dash, cushions nicely upholstered, Sarven patent wheels.

Buys this large two seated family carriage or surrey, without top, lamps or fenders, otherwise **just as shown in cut.** Price with top, including curtains, lamps and fenders, $54.90.

For this top buggy with **guaranteed rubber tires,** complete with top, back and side curtains, shafts, anti-rattlers, wrench and everything complete. **Our catalogue** shows many other styles.

Buys this large roomy phaeton complete with top, curtains, shafts, etc. Has wide roomy seat, spring cushion and back nicely upholstered. Comfortable.

For this Stick Seat Gentleman's Driving Wagon; has Sarven patent wheels, spring cushion, nicely upholstered in whipcord, **the greatest bargain ever offered.** Our catalogue shows many other styles

Buys this combination spring wagon with big body, two seats, good trimmings, shafts, heavy Sarven patent wheels. Our catalogue shows very large handsome illustrations and full descriptions; write for it.

Our catalog shows 98 styles of harness.

CUT THIS AD OUT and send it to us and we will mail you our free vehicle catalogue. Don't buy a vehicle or harness of any kind until you get it and see our **astonishingly low prices and the most liberal terms ever made. We ship on 30 days free trial. Write for Catalog Now.** **MARVIN SMITH CO. CHICAGO, ILL.**

$40 ...BUYS OUR... $40

Young American Top Buggy

Which has No 1 leather quarter top, leather backstays, lined back curtain, full set heavy rubber curtains, high grade **Black Hickory** wheels and woodwork, **1002 mile axles,** 1-4 inch round edge steel tires, **Double Braced Shafts,** open bottom spring cushion, panel spring back, high finish, Brussels carpet, storm apron, genuine patent leather dash, wrench, washers, and anti-rattlers. Sold on **30 Days' Free Trial. GUARANTEED TWO YEARS.** If you do not think this is as good as any regular $60 buggy send it back, and we will return your money. Write today for this buggy, or for our large free catalog of Black Hickory Vehicles and harness.

THE SAMSON CARRIAGE MFG. CO., 131 W. Pearl St., (Inc.) Cincinnati, Ohio.

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Cost no more than the unknown kind. Write for our **1904 FREE CATALOGUE.** For your own good, don't buy until you have examined it. Address Dept. "8"

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ALL STEEL LAWN FENCE

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UP-TO-DATE MANUFACTURING CO., 971 North Tenth Street, TERRE HAUTE, IND.

BUGGIES FROM OUR FACTORY $26.50

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BUGGIES Ask your dealer for the Western Amesbury Line of Vehicles, made only by Pontiac Buggy Co., Pontiac, Mich. Comfort, durability and style are the principal characteristics of these goods. The best medium grade of work on the market.

CASH for your fur, no matter where you are. We buy hides and pelts, too. Send for our new plan to make extra $$ on fur. Corry-Hide & Fur Co., Box 32, Corry, Pa.

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Direct to You

We are the only general merchandise house which owns, controls and directly manages a vehicle factory. We build our vehicles from the ground up and know what's under the paint. We add but one small profit to the cost of material and labor, hence our customers are getting a better made job in a finer finish and at a lower price than can possibly be secured elsewhere.

$19.80

"LEADER" Road Wagon — Imitation leather trimmed; carpet, wrench and shafts; just as illustrated. Write for further description.

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"CHALLENGE" Buggy—24 in. body, cloth trimmed; top, back and side curtains, storm apron, carpet and shafts. Write for details.

We also have better grades up to the very best and most stylish that can possibly be put together.

VEHICLE CATALOGUE FREE. Send for it today. It will give particulars about the above work. It also illustrates and describes the newest and best line of Runabouts, Stanhopes, Buggies, Phaetons, Surreys, Carriages, Carts, Spring Wagons, etc., ever quoted direct to the buyer. It explains the difference between good and unreliable work—between the hand-painted and the dipped buggy—and also explains our Guarantee of Satisfaction and

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Send a postal today for our Vehicle Cat. No. E1.

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A special circular quoting our entire line of Sleighs, Sleds, etc., will be sent at the same time, if you request it. 40

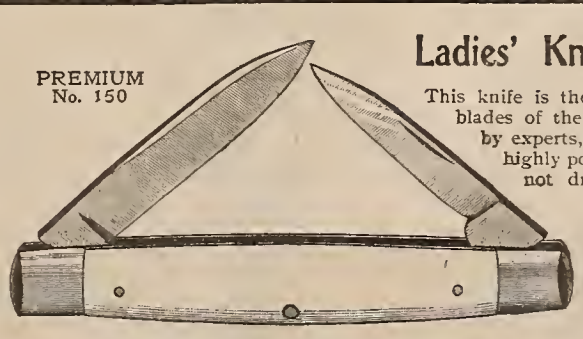
FLORIDA

ORNAMENTAL FENCE

25 designs, all steel. Handsome, durable.—Cheaper than a wood fence. Special inducements to church and cemeteries. Catalogue *free.* KOKOMO FENCE MACHINE CO., 427 North St., Kokomo, Indiana.

Ladies' Knife—Ivory Handle

PREMIUM No. 150



This knife is the finest grade of cutlery. It has blades of the very best cutlery-steel, tempered by experts, ground to a keen edge and then highly polished. This knife is hand-forged, not drop-forged, and on that account every knife is sure to come up to the highest standard of quality. The illustration is actual size. This Ladies' Knife has a beautiful ivory handle of the newest design, with German-silver trimmings.

This Ladies' Ivory-Handle Knife will be given FREE to any one for a club of FOUR yearly subscriptions to the Farm and Fireside at the regular clubbing price, 35 cents each.

This Ladies' Ivory-Handle Knife, and the Farm and Fireside ONE year, sent to any address for only 80 cents.

(To Club-Raisers:—When the subscriber pays you this special price you are entitled either to the regular cash commission or to count the name in a club.)

Address FARM AND FIRESIDE, Springfield, Ohio

Wit and Humor

Furor Scribendi

Mother's got the writing fever,
  Father's had it for a year,
Sister's "daffy" on the subject,
  Brother says the pen's his sphere.

Uncle's always planning essays,
  Aunt is busy making rhymes,
Grandma's writing "Recollections;"
  My! but these are learned times!

Niece is editing a paper,
  Nephew's got the sporting page,
Cousin's got the social column;
  Writing! Writing's all the rage!

Cook has quit to write up menus,
  Housemaid—she skipped out to-day,
Says that she can write a novel
  Just as good as Bertha Clay.

Coachman says he's sick and tired
  Holding reins for other folks,
He's resigned—he's found his mission—
  Going to write up funny jokes.

Seamstress left to write up fashions,
  Washerwoman winks her eye,
Says that she can scribble poems
  While the clothes are getting dry.

Teachers writing Nature sketches,
  Lawyers making legal notes,
Politicians filling volumes
  On the crime of buying votes.

Everybody, everybody
  Ramping after fame and pelf—
Gosh! I, too, have caught the spirit,
  Going to turn a scribe myself!
—Susie M. Best, in Leslie's Monthly.

"If at First You Don't Succeed"

COLONEL PUFFER—"Lorenzo, I hear that you and Chloe are going to marry. I thought she refused you."

Lorenzo—"'Deed she did, Kunnel—done 'fused me foh'teen times; but Ise bin persistenous, sah."—Judge.

Doctor Henson's Ready Repartee

The Rev. Dr. Poindexter S. Henson, formerly of Brooklyn, who has just assumed the duties of the pastorate of Tremont Temple, Boston, is quick at repartee. Recently one of his friends introduced him and his lecture on "Fools" as follows: "And now, ladies and gentlemen, we will listen to a lecture on 'Fools' by one . . . of the finest lecturers in the country."

Doctor Henson was on his feet in an instant. "Ladies and gentlemen," he said "every one knows I'm not so big a fool as my friend . . . would have you believe."—New York Tribune.

New to Him

Joseph Chamberlain, in one of his recent tariff-reform speeches, told a new umbrella story. Mr. Chamberlain wished to point out that ignorance was to blame for much of the censure that had been attached to his tariff-reform scheme. He said:

"Why, my friends, many of my opponents are as ignorant of my proposition as was a certain farmer many years ago of the umbrella.

"This farmer had made a journey of some twenty miles on foot to a small town. As he was about to set off for home again a hard rain came up, and his host loaned him an umbrella—a novelty at the time—opening it himself so as to save his friend all possible trouble.

"A week later the farmer took the umbrella back. The weather was bright and fine, but he held the instrument open over his head.

"'This contrivance,' he grumbled, 'is more trouble than it's worth. There wasn't a doorway in the village I could get it through, and I had to tether it all week in a field.'"—New York Tribune.

The Sorrows of Parenthood in Boston

"Dear me!" sighed Mrs. Hublets, as she looked down at her first-born.

There was a pained expression upon her countenance. It might almost be said to have been a look of agony.

For two weeks—in fact, ever since Ralph Waldo Emerson Hublets had first seen the light—she had been proudly, triumphantly happy. It is little wonder, therefore, that her husband, Minot Peabody Hublets, was deeply concerned. Her sudden change from joy to distress frightened him, and hurriedly taking her in his protecting arms, he asked, "What is it, my heart's treasure, that has caused the present disturbance of your equanimity?"

"Oh, Peabody! Peabody!" she wailed, at the same time directing his attention to their son, who slept serenely ignorant of the sorrow for which he was responsible, "it has just occurred to me that he can neither read nor write! Ah, Peabody! This lack of culture in a relative of mine is a humiliation that is hard to bear."

He dared not trust himself to speak, but having led her from the crib, they stood and gazed at each other in inarticulate sorrow.—Record-Herald.

A Youthful Poet

Some time ago we received from one of our youthful readers the following letter and "poem," which we publish verbatim:

FARM AND FIRESIDE EDITOR.
DEAR SIR:—I am a green hand at writing for a paper, I being only fifteen years old, but I thought I would try once, and if it failed to be published never write any more. Very truly,
LITTLE BILLY (nom de plume).

GEORGE WASHINGTON

When Washington was a little boy
  Scarcely four feet high,
He proved unto his father
  That he wouldn't tell a lie.

His father gave him a hatchet;
  It made him so very happy
That he said unto his father,
  "Oh, how I thank you, pappy!"

He chopped his father's favorite tree,
  And laid it on the ground;
His father appeared upon the scene,
  His coat-tails flying around.

George then said (within himself),
  "Oh, gracious, I am lost!"
Then turning to his father, said,
  "It must have been a frost."

At First Sight

The lady orator, a tall and angular female, was holding forth on the equality of the sexes and the rights of woman.

"Made from a rib!" she cried. "It is a canard devised by wicked men. Now, do I look as if I had been made from a rib? Do I? Can anybody say that I was? What kind of a rib was I made of? I pause for a reply, if there be one."

Here a small, unimportant-looking man rose, and bowed, and said, gently, "Yes'm; I think you was made from a rib."

"You do?" she retorted, shaking a lean finger in his direction; "you do? You are another of the men who wish to claim credit for everything, are you? And so you think I was made from the rib of a man?"

"No'm," was the solemn answer; "from the rib of an umbrella."—Judge.

The Retort Courteous

When Governor William H. Taft, who will succeed Mr. Root as Secretary of War, was a young man in Cincinnati, he was accosted one day, while driving on the outskirts of the city, by a pedestrian, who wanted to know how to get to a certain village.

"You go," said Mr. Taft, "down this road, and then you turn to the left, and afterward—but I am going in that direction myself. Will you get in and let me drive you?"

"Oh, I suppose so," said the stranger. "Poor company is better than none."

He climbed up and took his seat. He was tall and thin, with a very gruff, rude manner.

Young Taft tried to entertain him, tried to get him to talk, but he would say little. Once he drew out a well-filled case, selected a cigar, and returned the case to his pocket again. He was insufferable.

The young man whipped up his horse, and mile after mile was covered in silence. It was beginning to grow dark.

"How about that road to the left that I was to take?" exclaimed the stranger, suddenly. "Ain't we come to it yet?"

"Oh, we passed it six miles back," said Taft.

"Why didn't you tell me?" asked the stranger.

"Because I didn't want to lose your society. Poor company, you know, is better than none," said the young man.—New York Tribune.

Answered

The squire's pretty daughter (examining the village school)—"Now, children, can you tell me what is a miracle?"

THE RESOURCEFUL INVENTOR
The inventor he chortled with glee
As they fished his air-ship from the sea.
"I shall build," and he laughed,
"A submarine craft,
And perhaps it will fly," remarked he.

The children looked at one another, but remained silent.

"Can no one answer this question?" asked the new curate, who was standing behind the squire's daughter.

A little girl was suddenly struck with a brilliant idea. She held up her hand excitedly.

"Well, Nellie?" the squire's daughter asked, smiling approval.

"Please, miss," the small child replied, breathlessly, "mother says 'twill be a miracle if you don't marry the new curate."—London Tit-Bits.

In the bright lexicon of the cheap restaurant, the knife is mightier than the fork.—Judge.

"Why, William, I'm surprised!"
"It's mutual, ma; it's mutual!"

The Finding of Moses

In response to J. B.'s request for the words of an old Irish ballad describing the finding of Moses by Pharaoh's daughter, a number of friends have kindly come to our assistance. Most of the versions sent are taken from old scrapbooks of five and twenty years ago, and no two are exactly the same. One correspondent says the author was "Michael Moran, one of the last of the street-minstrels of Dublin;" another alludes to him simply as "an odd old character in Dublin over fifty years ago, who composed other quaint and amusing lines." Here is what seems to be the best version:

"On Aygypt's banks contagious to th' Noile
King Pharaoh's daughter wint to bathe in stoyle.
She tuk her bath, thin walked upon th' land,
An' to dry her Royal Pelt she ran along th' strand.
Tripped by a bulrush, lookin' down she saw
A smiling 'babby' on a wad o' straw.
Thin to her Royal Maids she cried in accints woild,
'Tare an' Agés, Gurls—which o' yes owns th' choild?'"

One version has these additional lines:

"'Tis none o' yours, you're moighty quick to say,
An' true it is—I've known you many a day.
Well, since we've found him in this bed o' roses,
By all manes let us christen him 'Howly Moses.'"
—New York Sun.

The Colonel's Lameness Grew

In a certain skirmish a Colonel ——— (General, he came to call himself) got a slight scratch on his leg. The wound was a matter of great glory to him, and he nursed it through after-days, growing lamer with every year, that the memory of his bravery might be ever near him.

One day, late in his life, as he sat nursing his leg and pondering the glorious past, a young man, visiting the family for the first time, approached, and sympathetically remarked, "Lame, General?"

"Yes, sir," after a pause, and with inexpressible solemnity, "I am lame."

"Been riding, sir?"

"No," with rebuking sternness, "I have not been riding."

"Ah! Slipped on the ice, General?"

"No, sir," with actual ferocity.

"Perhaps, then, you have sprained your ankle, sir?"

With a painful slowness the old man lifted his pet leg in both hands, set it carefully on the floor, rose slowly from his chair, and looking down upon the unfortunate youth with mingled pity and wrath, burst forth in the sublimity of rage, "Go read the history of your country, you puppy!"—London Tit-Bits.

Changing the Mood

Gen. Leonard Wood attended in his boyhood a school in Middleboro, Mass., and in Middleboro they still speak of the direct and original mind that the boy had.

"I remember one day in school," said a Middleboro man recently, "Wood was called up in the grammar-lesson. The teacher said, 'Leonard, give me a sentence, and we'll see if we can change it to the imperative mood.'

"'The horse draws the cart,' said Leonard.

"'Very good. "The horse draws the cart." Now change the sentence to a neat imperative.'

"'Gee up,' said young Wood."—Boston Budget.

Puzzled

"Yes," the new woman remarked, "I am greatly troubled."

"By what?"

"Well, I want to get married, just to prove that I can; and I don't want to get married, just to prove that I don't have to. If I don't, they'll say I can't; if I do, they'll say I have no more independence than any other woman."—Chicago Post.

Seeking Office

There was an aspiring citizen in Mississippi who used to quote grandiloquently the familiar saying, "The office should seek the man, not the man the office." On one occasion he was observed electioneering for himself in the old-fashioned style, with whisky, cigars, etc. Being reminded of his recent lofty utterances, he answered, "I still maintain my position. The office should seek the man; but, by gad! sah, the man should be around when the office is looking for him."—Argonaut.

Very True

Wurriedmann—"I tell you, money is the greatest trouble a man can have."

Darncote—"Yes; especially when he hasn't any."—Judge.

RHEUMATISM

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We want every one who has rheumatism to send us his or her name. We will send by return mail a pair of Magic Foot Drafts, the wonderful external cure which has brought more comfort into the United States than any internal remedy ever made. If they give relief, send us **One Dollar;** if not, don't send us a cent—**you decide.**

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ANNIE LEE GUNN, Augusta, Ark.

I am much pleased with your cheap and simple remedy. I have found it to be just as you promised.
J. H. DIRKMAN, Danube, Minn.

I never found anything that would help me before trying your Drafts. JOHN WHITE, Grafton, Mich.

I have suffered with rheumatism for the past ten years, but Magic Foot Drafts have entirely cured me. I have felt no pain since using them.
MRS. MARY ST. ANGE, Woonsocket, R. I.

We have thousands of long letters of gratitude from men and women cured of rheumatism by Magic Foot Drafts. Will you let them cure you? Write to-day to the **Magic Foot Draft Co., F. N. 4 Oliver Bldg., Jackson, Mich.,** for a trial pair of drafts **free on approval.** We send also a valuable booklet on rheumatism **free.**

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BOND STEEL POST CO., ADRIAN, MICH.

Wit and Humor

The Superlative

"I HAVE looked over the whole field," said the young author, "and the only thing that pays is a good novel."

"Wrong," said the philosopher.

"What pays better?" said the author.

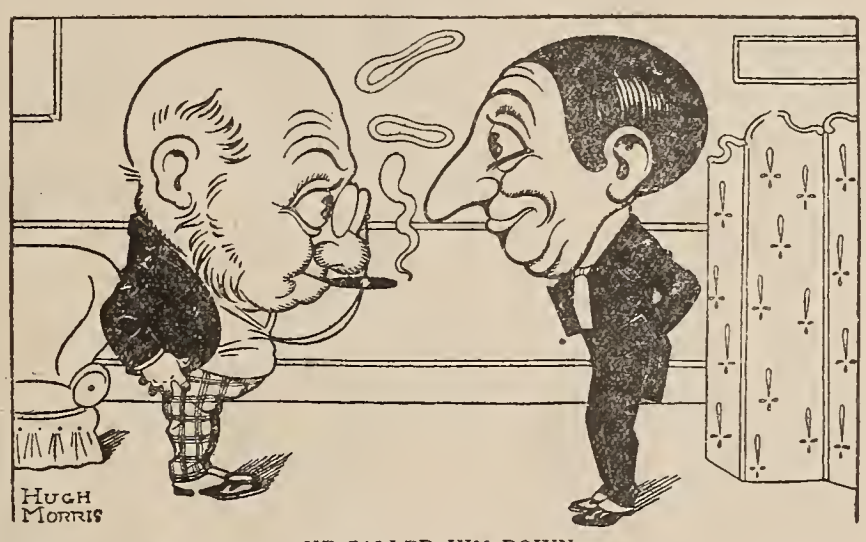
"A bad novel," said the philosopher. —Life.

Good Reason

"Gee whizz!" exclaimed the reporter, looking over his report of the wedding in the paper, "I'll bet that bridegroom will be sore."

"What's the matter?" asked the snake editor.

"He owns an old family homestead out in the suburbs somewhere, I believe, and he told me to say 'the young couple will reside at the old manse.' The paper's got it 'old man's.'"—Philadelphia Record.



HE CALLED HIM DOWN

Mr. Kousty—"So you want to be my son-in-law, eh?"
Charley—"Well, I'm not so particular about that. All I want is to marry your daughter."

How She Found Out

"Yes, for a year and a half she was in doubt as to whether she loved him enough to marry him or not."

"And how did she succeed in finding out?"

"There was another girl who got to acting as if she wanted him."—Chicago Record-Herald.

Got a Life Customer

"You haven't charged me nearly as much for half-soling these shoes as I expected."

"No, ma'am. We charge according to the size of the shoe."—Chicago Tribune.

Not at Liberty

A gentleman at the party who was very slightly acquainted with those present found the time hanging heavily upon his hands, and seeing another man who appeared to be in the same plight, he went up to him, and said, "I say, don't you find this affair awfully stupid? Come out with me and have a game of billiards."

"I should like to do it," was the reply, "but I can't very well leave."

"Why not?"

"You see—unfortunately—I'm the one who is giving the party."—Youth.

Success Likely

Mama—"Willie, I want you to stop that noise. Now, this is the second time I've spoken to you."

Willie—"Yes'm."

Mama—"If I speak to you again, do you know what will happen?"

Willie—"Maybe I'll stop. There's luck in odd numbers, you know."—Philadelphia Public Ledger.

His Job

"You are an able-bodied man. Why don't you go to work?"

"Dat's wot I'm goin' ter do, mum. Me an' me pardner is goin' ter dig de Panama Canal soon as dey gits de treaties fixed up right. De Senate is distressin' slow, mum. Ye couldn't advance me a couple uv dem pies in dere, an' take an order on de Secretary uv de Treasury, could ye?"—Kansas City Journal.

The Rule of Three

"One week from to-day, Uncle John, I will be a married man. Yes, in seven short days I will be initiated into the mysteries of matrimony."

"No mysteries about it, my boy. It is just the plain, simple rule of three."

"Rule of three? Eh—what three?"

"Wife, mother-in-law and hired girl."—Kansas City Journal.

A DIFFERENCE

"Miss Antique reminds me of a flower."
"The rose-bush?"
"No; the century-plant."

EXTRAORDINARY MERIT
Of a New Catarrh Cure

Physicians are slow to take up new and untried remedies until their value has been established by actual experiment, and they are naturally skeptical of the many new preparations constantly appearing, and for which extravagant claims are made.

The most liberal and enlightened physicians are always ready, however, to make a fair trial of any new specific, and get at its true medical value.

A new preparation for the cure of catarrh has attracted much attention in the past few months, and has met with great favor from the medical profession, not only because it is remarkably successful in the cure of catarrh, but also because it is not a secret patent medicine—any one using it knows just what he is taking into his system.

It is composed of blood-root, which acts on the blood and mucous membrane; hydrastin, for same purpose, to clear the mucus from head and throat, and red gum of eucalyptus-tree, to destroy catarrhal germs in the blood.

All of these antiseptic remedies are combined in the form of a pleasant-tasting tablet, or lozenge, and are sold by druggists under name of Stuart's Catarrh Tablets, and many recent tests in chronic catarrh cases have established its merit beyond question.

Dr. Sebring states that he has discarded inhalers, sprays and washes, and depends entirely upon Stuart's Catarrh Tablets in treating nasal catarrh. He says: "I have had patients who had lost the sense of smell entirely, and whose hearing was also impaired from nasal catarrh, recover completely after a few weeks' use of Stuart's Catarrh Tablets. I have been equally successful with the remedy in catarrh of the throat and catarrh of stomach. I can only explain it on the principle that catarrh is a constitutional disease, and that the antiseptic properties in these tablets drives the catarrhal poison completely out of the system."

Dr. Odell says: "I have cured many cases of catarrh of stomach in past four months by the use of Stuart's Catarrh Tablets alone, without the use of any other remedy and without dieting. The tablets are especially useful in nasal catarrh and catarrh of the throat, clearing the membranes and overcoming the continual hawking, coughing and expectorating so disgusting and annoying to catarrh sufferers.

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THE VALUE OF CHARCOAL

FEW PEOPLE KNOW HOW USEFUL IT IS IN PRESERVING HEALTH AND BEAUTY

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature, but few realize its value when taken into the human system for the same cleansing purpose.

Charcoal is a remedy that the more you take of it the better; it is not a drug at all, but simply absorbs the gases and impurities always present in the stomach and intestines, and carries them out of the system.

Charcoal sweetens the breath after smoking, drinking, or after eating onions and other odorous vegetables.

Charcoal effectually clears and improves the complexion, it whitens the teeth, and further acts as a natural and eminently safe cathartic.

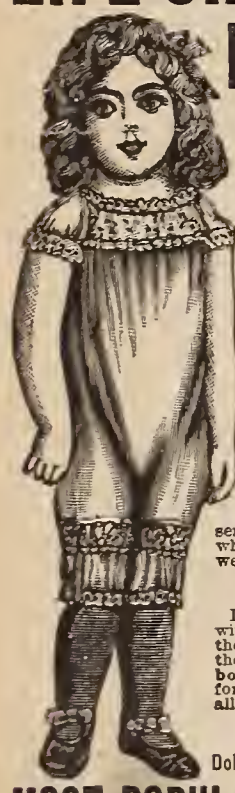
It absorbs the injurious gases which collect in the stomach and bowels; it disinfects the mouth and throat from the poison of catarrh.

All druggists sell charcoal in one form or another, but probably the best charcoal and the most for the money is in Stuart's Absorbent Lozenges; they are composed of the finest powdered Willow Charcoal, and other harmless antiseptics in tablet form, or rather in the form of large, pleasant-tasting lozenges, the charcoal being mixed with honey.

The daily use of these lozenges will soon tell in a much improved condition of the general health, better complexion, sweeter breath and purer blood, and the beauty of it is that no possible harm can result from their continued use, but, on the contrary, great benefit.

A Buffalo physician, in speaking of the benefits of charcoal, says: "I advise Stuart's Absorbent Lozenges to all patients suffering from gas in stomach and bowels, and to clear the complexion and purify the breath, mouth and throat; I also believe the liver is greatly benefited by the daily use of them; they cost but twenty-five cents a box at drug-stores, and although in some sense a patent preparation, yet I believe I get more and better charcoal in Stuart's Absorbent Lozenges than in any of the ordinary charcoal tablets."

LIFE SIZE DOLL FREE



2½ Feet High.

Girls, here is a Great Big Doll; big enough to wear your outgrown baby dresses, which you can put on and off, button and unbutton, to your heart's desire. It is the most popular doll made. Dollie has an indestructible head, golden hair, rosy cheeks, brown eyes, kid colored body, red stockings, black shoes, and will stand alone. It is an exact reproduction of a hand painted French Doll and will live in your memory long after childhood days have passed. We will give this beautiful doll absolutely Free as a premium for selling only four boxes of our Great Cold and Headache Tablets at 25 cents a box. Write today and we will send Tablets by mail postpaid. When sold send us the money ($1.00) and we will send you this Life Size Doll which is 2½ feet high, and can wear baby's clothes.

EXTRA PREMIUM.

If you send us the money within one week after receiving the Tablets, we will send with the doll, six Gold plated Ribbon Pins, as an extra premium for prompt work. We take back all goods not sold. Address,

NATIONAL MEDICINE CO.

Doll Dept. 135, New Haven, Conn

MOST POPULAR DOLL MADE

Free Gold Watch

This fully warranted Solid Gold Plated Watch, equal in appearance to a $35.00 Gold Filled Watch warranted 20 years, is given FREE to Boys and Girls or anyone for selling 20 pieces of our handsome jewelry at 10c. each. Send your address and we will send the jewelry postpaid, when sold send us the $2 and we will positively send you the watch, also a chain for quick work. Write to-day. BOND JEWELRY CO., DEPT. 36 CHICAGO.

$3 a Day Sure Send us your address and we will show you how to make $3 a day absolutely sure, we furnish the work and teach you free, you work in the locality where you live. Send us your address and we will explain the business fully, remember we guarantee a clear profit of $3 for every day's work, absolutely sure. Write at once. ROYAL MANUFACTURING CO., Box 1048, Detroit, Mich.

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BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

Miscellany

The Light Brigade

THAT the charge of the Light Brigade seemed to onlookers a piece of magnificent folly is evident from all reminiscences of that day. First came the attack of the Heavy Brigade upon three thousand Russian cavalry. Then, later in the day, the attempt to recapture seven guns taken from the Turks by the Russians in their first advance upon the redoubts led to the charge of the Light Brigade.

"When we saw the English coming at us," says a Russian soldier, "there was but one thought. 'What fools!' we said. We never dreamed they would charge."

Ivan Ivanovitch, a Russian survivor of the day, says in his "Recollections:" "We were so sorry for them. They were fine soldiers, and had such fine horses. But the charge—it was the maddest thing ever done. We could not understand it. I had been in the charge by the Heavy Brigade in the morning, and was wounded. We had all unsaddled, and were tired. Suddenly there was a cry. 'The English are coming!'

"Our colonel was angry, and ordered the men to give no quarter.

"I was lying down with my wound bandaged when I saw them coming. We thought they were drunk, from the way they held their lances. Instead of carrying them under their armpits, they waved them in the air. Of course, they were easier to guard against like that.

"Those men were mad, and never seemed to think of the tremendous numbers against them, nor of the fearful slaughter that had taken place in their ranks during that desperate ride. Then they neared us, and dashed in among us, shouting, cheering and cursing. I never saw anything like it. They were irresistible, and our men were quite demoralized."—Youth's Companion.

Animals of Advanced Age

Three horses, the aggregate age of the equine trio being not less than ninety years; a cat that has lived in the same family for twenty-five years, and a gray squirrel that has been a pet of one house for twelve years, all live in Kane and Dekalb Counties. It is declared that in this near-Chicago atmosphere the animal tribe manages to enjoy life for the longest terms of which history tells.

One of the horses and the squirrel are owned by Mrs. N. A. Haile, who lives in Maple Park, Kane County. Mrs. Haile says that her mare Maggie is thirty years old, and that she will yet run off at the drop of a hat.

The squirrel, Goldie, was captured when a wee animal, along with its sister. The dogs killed the latter, and Goldie ran away and remained six months, but came back and went straight to the little nest in the stairway leading to the basement of the Haile home. In the twelve years in which the little animal has been about the premises it has thrashed all of the cats in the neighborhood, its plan of fight being to mount the back of a feline in about the same manner that the latter is accustomed to get the better of a dog. The squirrel gets the rheumatism occasionally, and lies about the warm places after the fashion of a man who is complaining of the same ailment.

Until late last fall another of the aged equines had a steady job at an elevator at Sycamore. Everybody in the town knew the horse as Old Tom. Tom was blind from birth, but he trudged around a circle for upward of three decades. Last fall the owners of the elevator invested in a gasolene-engine, and poor Tom lost his job, but was pensioned on a full pay of feed.

The other horse and cat are owned near Richardson, in Kane County. The horse is a mare that, could she talk, would speak of her proud record as a mother. Her teeth show her to be thirty years old, and for each year since she was old enough to produce her kind she has had a colt. She produced one last year, and is again expectant.

J. V. Pratt, whose home is near the village of Richardson, owns the cat. He says that his pet is the oldest feline in the United States, and the entire family treasure and care for him more than they would a race-horse with a two-minute record. The cat—his name is John—has an acquaintance that extends the length and breadth of Kane County. As a hunter John has a record that should entitle him to the name of Daniel Boone or Davy Crockett. His master claims that he has exterminated an army of gophers. He does most of his work at night, and when he has made a capture he carries the game to the house, and jumps upon the window-ledge, where his master may observe the fruits of his prowess from his bed inside the house.

Mr. Pratt says that John came to him as a kitten in April, 1879, and he will therefore be a quarter of a century old next spring. At this time he is ailing a bit, but for all of that he is able to go to the barn, climb upon the manger and wait for rats.—Chicago Record-Herald.

Can Corporation Attorneys Block Food Legislation in the Senate?

The champions of pure-food legislation have won a signal victory in the popular branch of Congress. By a rising vote of two hundred and one to sixty-eight the House on Wednesday, January 20th, passed the Hepburn Pure Food Bill, after two days of spirited debate in which the representatives of food-frauds and food-adulterators assaulted it at every point. As a final blow for the enemies of pure-food legislation, the amendment inserting the word "wilfully" in connection with selling adulterated or misbranded food products was stricken out by a yea-and-nay vote. This amendment, if it had been allowed to stand, would have compelled the government to prove intent to violate the law on the part of the vendors before they could be punished. The principal amendment to the measure is that which provides that the law shall not be construed so as to prohibit American manufacturers from exporting food products in accordance with the directions of the foreign purchaser, provided it does not violate the laws of the purchaser's own country. This is a wise and sensible provision. Under this provision American packers, for instance, may ship meat products preserved with boracic acid when ordered in that way, unless the foreign country to which it is shipped has a law expressly prohibiting the use of this preservative.

The bill provides for the establishment in the Department of Agriculture of a bureau of chemistry in foods, the duties of the chief of the bureau being the inspection of food and drug products. It prohibits the introduction into any state or territory of any article of food or drug which is adulterated or misbranded.

Any person who introduces into the states or territories adulterated or misbranded foods will be deemed guilty of a misdemeanor, and upon conviction shall be fined two hundred dollars for the first offense, and three hundred dollars for each subsequent offense, or be imprisoned for not exceeding one year, or both. It provides for the confiscation of adulterated goods and for their sale, the proceeds of which will be turned into the United States treasury.

Foods are to be considered adulterated if any substance has been mixed or packed with them which will lower or injuriously affect either their quality or strength, or if any valuable constituent has been removed, or if offered in sale in imitation of goods disposed of under a distinctive name, or if any poisonous ingredients have been added.

It now remains to be seen whether the representatives of powerful interests that have capital invested in the manufacture of impure foods will again succeed in defeating pure-food legislation. The bill introduced by Senator McCumber is a good measure, but it was framed as a concession to those who feared the consequences of lodging so much authority in the Secretary of Agriculture. The new Hepburn Bill, however, as amended and perfected, should be satisfactory to all honest friends of pure-food legislation. The House has blazed the way. Will the Senate defy public sentiment, and again block national legislation against food-frauds?—What-to-Eat.

The Way It Looks to the Owls

Always look a gift wheel in the tire.

It's a long worm that has no turning.

A handful of wit is worth a bucketful of brag.

It's a wise golfer that knows his own caddie.

A day of borrowing is a week of sorrowing.

Don't build a church and present God with the mortgage.

If you are born in a barn-yard, you must scratch for a living.

A neighbor's bird on your table is worth two in your berry-patch.

The prudent man pedaleth in peace, but ruin lies in the path of the scorcher.

The fawning men will flatter a Klondike burro if he carries gold enough.

The wit who was born under a dime planet will never make a dollar joke.

Men are like matches—no virtue comes out of them until they have rubbed up against a hard place.

The Mother-Trout (to her children)—"All are not flies that flutter; all that wriggle are not worms."—Boston Brown Book.

The Family Physician

By R. B. HOUSE, M.D.

Health and Happiness

TAKE moderate exercise and plenty of fresh air.

Use fresh ripe fruits freely, but avoid pork, grease, pies and cakes.

A Practical Hint

If a bristle probang is not at hand for the removal of fish-bones, pins, needles, etc., from the upper part of the esophagus, make a little ball of absorbent cotton, lubricate it with a little butter after it has been tied to a string, and cause the patient to swallow it. By pulling it out again with the string the foreign body can often be removed.

Boiled Milk Versus Fresh Milk

When some five or ten years ago the germ theory came in upon us like a flood, it was decided that all milk to be fed to infants must be either pasteurized or sterilized. Pediatrists are now receding from this position, there being a wide and increasing impression, based upon observation, that a diet of milk that has been subjected to heat in this manner is liable to produce rickets, pot-belly, sweating, flabby muscles, craniotabes and restlessness at night. Fresh, pure, raw cows' milk is once more in the ascendant as the best substitute for the mother's milk.

Fresh Air

I find from personal experience that pure, fresh air in the lungs will do more for a tired, peevish woman than gallons of medicine.

Stop right in the midst of the work of baking, washing or any other task, and go out into the open air, or throw open a window; draw in the air through the nostrils until the lungs are filled, then exhale through the mouth. Remember not to reverse this, because if the air is cold no little harm may result. Take at least eight or ten deep breaths at first, and increase the number each time if desired, or else practise oftener as time goes on. At first take a "breathing spell" once or twice each day, and also before retiring. Always remember that pure air and loose, comfortable clothing are all-important.

If one's lungs are weak to begin with, the inhalation of air by deep breathing will prove painful, and the patient should cease each time just as the pain gives warning. In time the painful sensation gives way to a feeling of rest and exhilaration.

I believe that consumption would seldom be heard of if people would only learn how to breathe, and that the germs cannot live in pure, fresh air.

Breathing for Strength

Instead of the above heading might be written "Breathing for Life," for that is really what we do. And since this fact is so easily demonstrated, it is strange that we have not more quickly and fully discovered that in this vital process lies the secret remedy for a thousand ills, if not "the fabled fountain of immortal youth." Men have lived weeks without eating, days without drinking, and nights without sleeping. But how long can we live without breathing? Twenty ounces of food and a few pints of water will supply the body one day, but upon a low estimate it requires thirty thousand pints of air in the same length of time.

The delicate machine which this volume of air enters is said to contain over seven hundred million air-cells, or little workshops. Into the walls of these there flows, like the sewage of a great city, the foul, venous blood of the body. In these remarkable workshops it is quickly transformed into a rushing red torrent filled with life-giving oxygen from the air. What a wonderful invention! What a miraculous process! And you are trusted with operating one of these instruments.

Would you note its magical effect under proper conditions? Then stand erect, open the doors and windows, or if you are sick in bed, have them opened, lift your chest and chin, and breathe the invigorating air of heaven until the muscles of your abdomen fairly bound with joy. Now, isn't that a better tonic than tincture of iron? Then take it many times a day. Doesn't it taste better than Doctor Almanac's bitters? And it is better, infinitely better, and you can repeat the dose often. Even as I write, the fresh air tickles my finger-tips; for when we breathe deeply, it goes to all parts of the body.—Clifford G. Howell, in Health.

While a healthy body helps to make a healthy soul, the reverse is yet more true. Mind lifts up, purifies, sustains the body. Mental and moral activity keeps the body healthy, strong and young, preserves from decay and renews life.—James Freeman Clarke.

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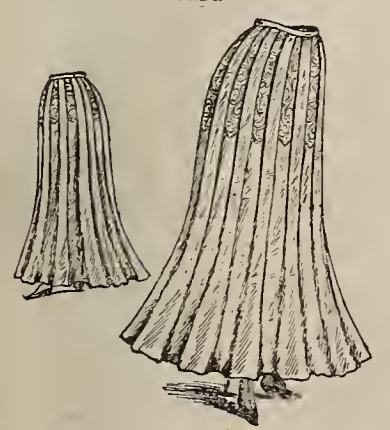
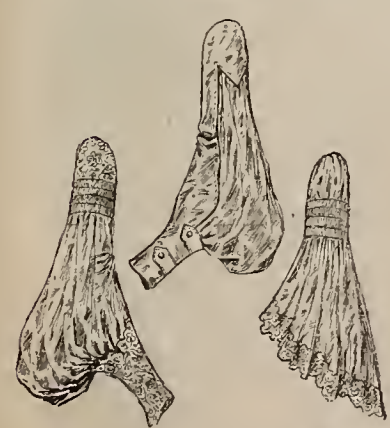


No. 4638.—MISSES' BOX-PLAITED SKIRT. 11 cents. Sizes, 12, 14 and 16 years.



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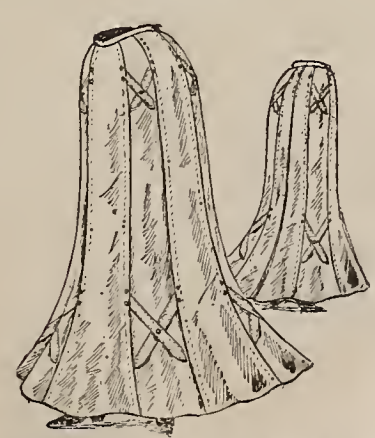

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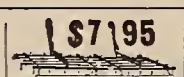

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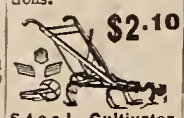

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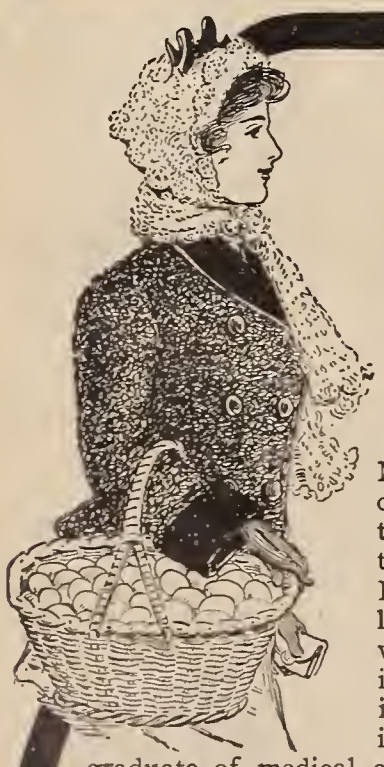

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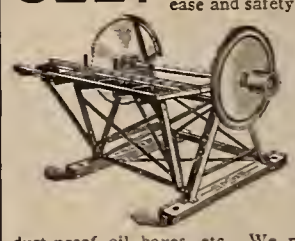

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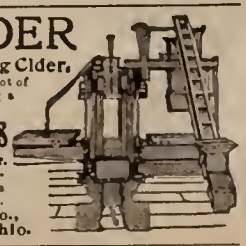

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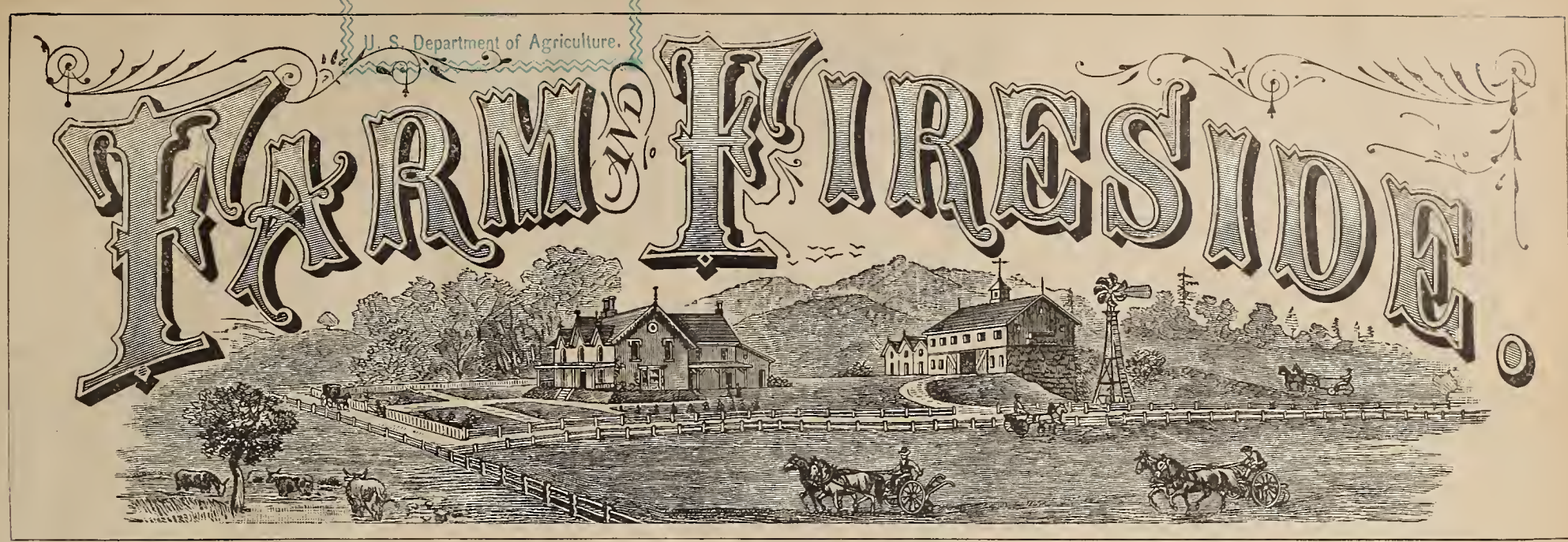

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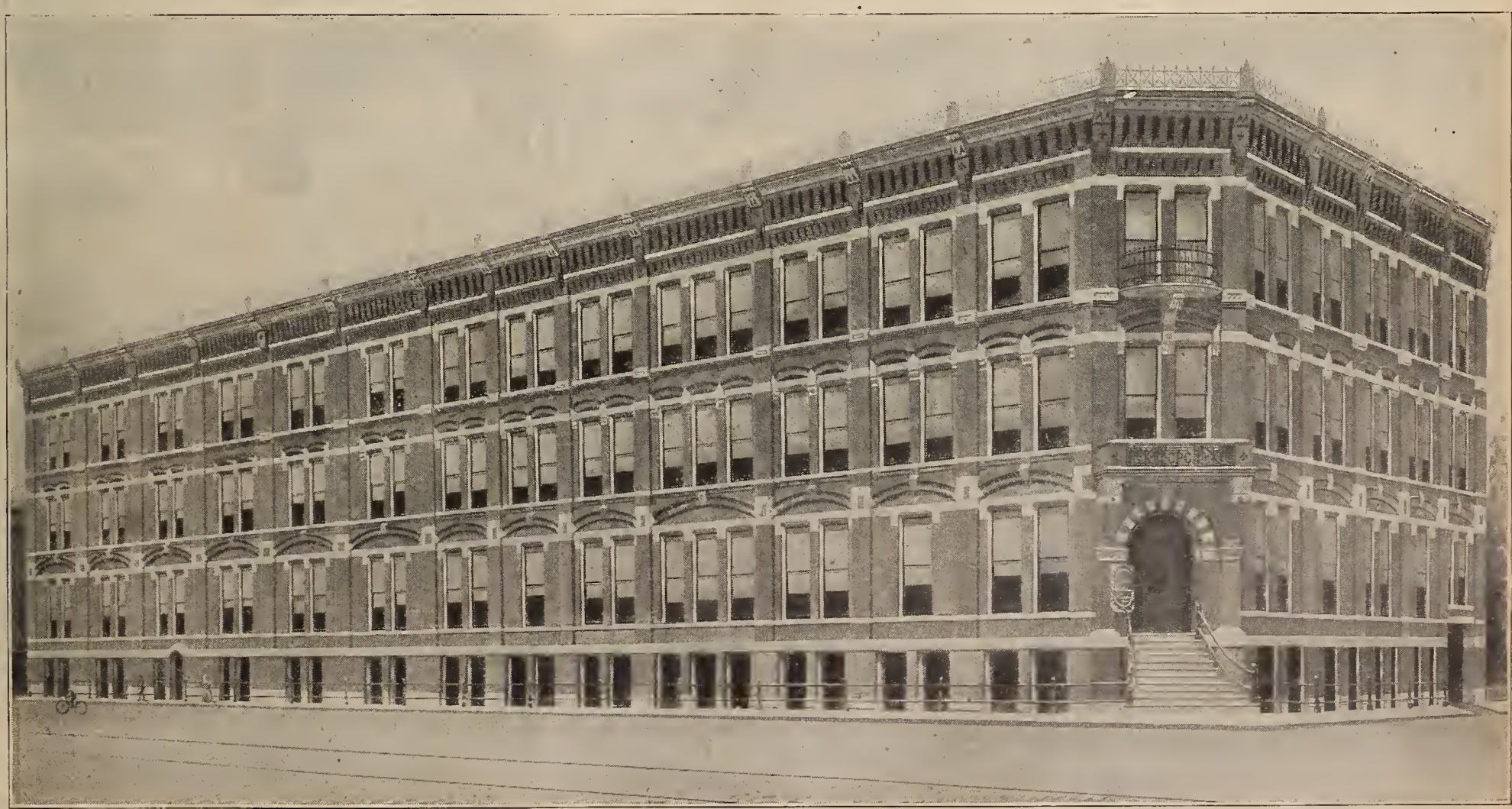

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Mr. Greiner Says:

As a Rule I find a steadily increasing attendance at farmers' institutes and other agricultural meetings. It is a most hopeful sign of the times for agricultural progress.

It Takes Money to keep the experiment stations going so that they will give results worth having. Professor Bailey said at the horticultural meeting at Rochester the other day that when the stations cease to ask for more money, let them die. Most of the stations at present give full value in return for the money they receive, and as long as they do that the country can afford to support them liberally.

Appropriations for the Stations.—This winter seems a most opportune time for farmers to demand their just rights from the legislatures and state executives. A most important election is coming, and the politicians of all parties will be willing enough to curry favor with their rural constituents. The state station at Geneva, N. Y., as well as the Cornell Agricultural College at Ithaca, N. Y., have needed larger appropriations for sorely needed equipments for some time. They needed them last year; but farmers, by petition, letters and personal entreaties, asked in vain. The politicians shrugged their shoulders, and asserted that the state was "too poor." This year the politicians sing a different song. They tell of the great importance of the agricultural interests of the state and nation, and are just falling over one another in their haste to assure the farmer that all it is necessary for him to do is to ask, and it shall be given. This is no time for the farmer to be modest.

Chemistry of the Soil as Related to Crop-production.—"Instructive and somewhat amusing" was the way in which both Doctor Van Slyke and Director Doctor Jordan of the state station at Geneva, N. Y., paid their compliments to the Bureau of Soils of the department in Washington for its Bulletin No. 22, recently issued. Said bulletin seems to promulgate some strange doctrines. It teaches, for instance, that one soil is as good as any other soil, and that all soils contain plant-foods sufficient to maintain fertility indefinitely for all time to come. The question of crop-production would therefore be one of soil-manipulation and soil-moisture rather than of feeding. If the contention of the Bureau of Soils has just grounds, it would relieve us of the necessity of carting manure or buying chemical or other plant-foods. The assertion seems absurd on its very face, against common sense, and against the first rules of arithmetic. We do know that soils are not equally well provided with plant-foods, including both available and fixed. We know that some soils are more or less deficient in one or the other of the essential elements of plant-food, phosphoric acid and potash, or even lime. We know that some crops remove vast quantities of mineral soil-constituents. How many full crops, for instance, of cabbage or of alfalfa could we take off a piece of quite fertile ground before some of the mineral elements would be all used up? If a full crop of cabbage removes four hundred pounds of potash from an acre of ground, the removal of a few such crops, without added plant-foods, must leave that soil perceptibly poorer in potash. Doctor Van Slyke illustrated his point quite amusingly by relating the following conversation between a patient and his physician:

Doctor—"Is your appetite good?"
Patient—"First-rate; never better."
Doctor—"Do you digest your food all right?"
Patient—"Yes, perfectly."
Doctor—"Have you any feelings of discomfort or fullness in your stomach?"
Patient—"Not the least."
Doctor—"Wonderful! Well, I will give you a prescription. Follow the directions faithfully, and it will change all that."

Now the farmer comes to the Department of Agriculture for information. Then imagine the following colloquy to take place:

Department—"You are managing your farm successfully?"
Farmer—"Yes, sir, I am having fair success."
Department—"You are raising good crops?"
Farmer—"Yes, sir; very good ones."
Department—"Making some money?"
Farmer—"I am holding my own, and make some profits."
Department—"Wonderful! Well, here is Bulletin No. 22. Follow its teachings, and it will change all that."

Root-action on Plant-foods.—Bulletin No. 22 (Bureau of Soils) also denies that plant-roots have the power to dissolve plant-foods by their own acid secretions. Doctor Jordan pointed out that we have no business to reject a new doctrine simply because it is revolutionary. What is looked upon as an established truth to-day may be universally regarded as an error to-morrow. But there are scientific rights and the rights of constituents which should be respected. The most careful scientific investigations seem to have settled it as a fact and beyond doubt that plant-roots do dissolve plant-foods by their own acid secretions, and thus make them available. The sin of Bulletin No. 22 is that its novel teachings are based on insufficient data and insufficient scientific investigation. Doctor Jordan expects an era of soil-investigation as one of the good results of the aforesaid bulletin. He also admits that the mere presence of plant-food in a soil is not necessarily fertility. Sometimes a minimum of fertility will do its maximum work. Lots of fertilizers have been wasted, and we should not imagine that we can accomplish our object of crop-production by simply dumping a lot of fertilizers on the soil. I do believe that at times we have placed an undue burden of importance or responsibility upon the chemistry of the soil, expecting all from the presence or application of plant-foods, especially when using them in concentrated forms, and hardly thought it worth while to consider the soil-physics—its texture and its manipulation. Bulletin No. 22 goes to the other extreme, teaching us to expect everything from soil-physics, and little from the chemistry of the soil. In truth, one is as important as the other. Professor Beach's experiments with lettuce in the greenhouses of the station at Geneva, N. Y., give a good illustration. In the boxes containing common loam (from rotted sods), to which chemical fertilizers, with or without moss, had been added so freely and in so well-balanced ration that we must concede Mr. Beach had well looked after the chemistry of the soil, the lettuce-plants are making slow and unsatisfactory growth. In the same soil, however, with the plant-foods added in the form of old compost, the lettuce-plants are doing their level best, showing that there are other things in the soil (and these not always recognized) besides the mere plant-foods, which exert a powerful influence upon crop-production. There are causes and effects about which there is still a great deal to be learned.

Mr. Grundy Says:

Work and Wages.—When we used to bind wheat by hand, over thirty years ago, I was a farm-hand, working a few months here and a few there, and "seeing the country," and when I made a contract I always stipulated that when harvest began I was to receive harvest wages, and to be allowed to help any other farmer in the locality as long as there was harvesting to do. One harvest I was employed by a neighbor who had sixty acres of wheat on some new land about twelve miles away to help him until harvest began on the farm on which I lived, his wheat ripening three days earlier than any other in the neighborhood. Hands were very scarce in that immediate locality, and all he could secure was an old Irishman and myself. When we arrived at the farm, we found eleven men and boys already on the ground waiting for a job. We had agreed on two dollars and fifty cents a day as a fair wage, but the delegation from the woods demanded two dollars and seventy-five cents a day. The farmer declared that he would let the wheat rot before he would pay it. The delegation withdrew to the fence to deliberate, and the farmer began operations with only two binders. About the middle of the forenoon a "walking delegate" from the group sitting on the fence came over to request us to strike for the other quarter. Said he, "We kin git it in five minutes if you fellers will jest quit. He's got to have hands, an' if you fellers quit he'll hire a full set, an' pay us the price." The Irishman stepped up to him, and shaking his fist under his nose, he said, "Now, ye jest git out o' here, or Oi'll jest crack yer cocoanut fer ye!" He retired without any further remarks. After he was gone the old man said, "Now, Grundy, do ye see the foolishness o' thim fellers? In another hour we'll be half a day ahead o' thim, an' it will take thim foive days to catch up wid us if they git that other quarter." At noon five of the men in the crowd came in and asked for a job.

Long Workdays.—When I was a farm-hand I sometimes used to "kick" when I had to work over twelve hours in a day, but after I got to working for myself I often thought I could not get quite as much done as I wanted to in fourteen hours, and not infrequently I made the day sixteen hours long. Since that time I have often thought that there was no sense in working so long and so hard. One wears himself out, and makes himself incapable of enjoying what he gains. I know that I often suffer from complaints superinduced by going a little further when I should have stopped, and by exposure to inclement weather when I should have been under cover. For several years I have made it a practice to make my working-day about ten hours long, and I believe I can accomplish more and do better work than when I worked fourteen and sixteen. When one works so hard and long that he cannot think clearly and plan well, he is working at a disadvantage. One needs an active brain to help his muscles. If he persists in going to the limit of physical endurance day after day, his mind becomes sluggish, and he is more like an ox than a man. It pays the farmer big to keep his mind bright and active all the time. A bright mind means better work, better crops, more profit, and a capability to enjoy the best things in life. I once asked a hard-working farmer if he had noticed what a well-known stock-feeder had said in an agricultural paper he was taking. He said he hadn't noticed it. "In fact," said he, "I have been so busy the past few weeks that I have not even had time to tear the wrappers off the last five or six numbers." I told him that I used to be afflicted by that very same ailment, but that I had cured myself of it, and now knew more than I used to.

Miners' Hours and Wages.—I see that the coal-miners are demanding shorter hours and more pay, and that they are determined to get both if it takes a strike of all the miners in the country to accomplish the object. I am now paying twelve cents a bushel for coal that a few years ago I obtained for six or seven cents, and I cannot see that the operators are any more opulent than they were, or that the miners are living or dressing better. But one thing I do notice is that saloons and pool and billiard rooms and bowling-alleys are increasing in number in what are termed "mining" towns. I am wondering if there is any connection between these and "shorter hours and higher pay." Are the consumers of coal supporting these "places of amusement?" I don't see how we can afford to pay any higher prices for coal. I know that thousands of farmers are buying little loads, in the hope that the present high prices will come down a little. The present outlook indicates still higher prices. What is the farmer to do? I must confess that I do not know, except it be plant trees. It is plain that the miner will take into consideration no interests but his own. I have chatted in a pleasant way with a number of them, and when I suggested that they might go a little too far in their demands they invariably declared that they were not receiving as much as they are entitled to, and that their commander-in-chief will see that "we get what's coming to us!" Almost to a man they believe that a great strike of all the miners in the United States will come in a short time, and then they will be given everything they ask for, because without coal everything will come to a standstill. A manufacturer who uses a great deal of coal said to me, "Some years ago the miners were not treated right by the owners of the mines, and I was with them in demanding a fair chance to earn a living and something over. But as soon as they declared that no man should work in the mines unless he was a member of their organizations, and that no miner should be allowed to get out more than a certain quantity of coal in a day, no matter how expert he might be, I thought they were going too far, and I am no longer in sympathy with them. I contend that every man has a right to sell his labor wherever he pleases, and at the highest price he can get for it, and that no person should be allowed to prevent him from so selling it, and if he can do twice as much work as the next man he should be allowed to do it and be paid for it, and not be held down to the level of the slowest man in the factory."

The Farmer's Advantages.—I don't know whether farmers generally appreciate the advantages they enjoy along this line. They have the full right to grow any kind of a crop they wish, and to make the yield as great as they can. No "order" or "organization" can compel them to grow any certain crop, or to limit the yield to the acre. The farmer may not be getting as high a rate of interest on his investment as some people, but he can offset this by the entire independence he enjoys. I intended to discuss the fuel question, but have gotten entirely away from it. Probably some of these things will right themselves in time, but it is good policy to take some steps in the direction of cover, so that one will not suffer when the storm bursts. I would advise all who have an acre or two of natural forest on the farm to give it good care, and to fill up vacant spaces with rapid-growing trees. Those who are entirely without wood should plant some this spring. Last year we were without coal in this locality for several weeks. Those farmers who had maple and other groves on the farm thinned them out and piled up stacks of wood, and as soon as they learned how to manage it as fuel they got along swimmingly, while those who had no grove were raking and scraping up cobs, chunks and sticks wherever they could find them. We don't know how soon another fuel-famine will be upon us, and it might be a good idea to drop an anchor to windward and get ready for it. I have found that a stick of almost any kind of wood is an excellent aid in making a hot fire in an open stove or a steady one in a tightly closed heater when burning cobs. Less cobs are required, and the fire is held much longer.

Look at the date on the little yellow address label on this paper, and if your subscription has expired, or is about to expire, do not fail to promptly send your renewal. FARM AND FIRESIDE is indisputably the most popular journal published for the farm and the home at the low price of twenty-five cents a year. Remember, it comes twice a month—24 big numbers for 25 cents. Attend to it to-day.

All Over the Farm

Farm Theory and Practice

GROWING TIMBER.—Several states are making attempts to demonstrate that it is profitable to grow timber on some kinds of land. There is much need of such demonstration. All the advocacy of forestry that is not based upon reasonable expectation of cash returns to the owners of the land is a waste of time so far as farmers are concerned. Our money is invested in our land, and we have a living to make from our investment. We may believe that forests affect climate and the regularity of the supply of water from streams, but we do not save or plant a tract of timber because we know or think we know such things. Our individual effort would be of no avail by itself; and anyway, matters of value in this world are not accomplished in such fashion. We have land devoted to corn and potatoes because such crops pay, and we shall have portions of our farms growing trees when we have reason to believe that timber-growing will pay. So far as individual landowners are concerned, the dollar must measure the wisdom of all kinds of planting.

THE PLACE FOR TREES.—All rich, arable land should be producing crops that are more profitable than trees—that is true enough; but there is good reason for believing that in nearly every one of our best agricultural states we have in the aggregate hundreds of thousands of acres of land that can be given over to timber-production with profit. We need some more tangible proof than we now have, and we need more knowledge about tree-growing, and I am glad that some of the states are making practical experiments in order that data may be secured.

The aggregate of waste land in good states is enormous. The area under the plow that cannot make the owner a cent of profit from cropping is immense. Our great need is sufficient nerve to cut out this area in our planning, ceasing to depend upon it for immediate income when we should know that it cannot bring to us any clear profit, and then we need a scheme for profitable tree-growing on such land. That this is possible to us I truly believe, and the demonstration cannot come too quickly.

WHAT MAY BE DONE.—Possibly the first thing to be done is to show the profitableness of timber for fence-posts, telephone and telegraph poles, and for maintaining the supply of second-growth hardwood for manufacturers. This will appeal to tens of thousands of farmers who have only a few acres each of waste land. We want to know what to plant, how to plant and what rate of growth we may expect. Enormous as is the demand for such supplies, they are only the entering wedge in opening up our interest in timber-growing. Scarcity is making prices high for the class of timber mentioned, and we turn to it first because the harvest is comparatively close. Most men can hope to see their crop ready for market within their lifetime—young men may secure several crops from their planting—and that encourages. But soon we shall see the wisdom of reforesting poor, rough land, to add value to our possessions and to provide for our children after us. We have been busy cutting trees down, and in a short time we are to see the wisdom of the growing of new forests on land that has no value for other purposes.

THE DUTY OF THE STATE.—The state should offer encouragement of a practical sort. While its experiment stations and forestry boards or associations are spreading information, the individual landowner should have taxes remitted on every acre of timber-land. As a nation we can afford to let all taxation rest upon other forms of property than the forests we need so badly to exercise control on our climate and our streams of water, and to supply us with timber. But the state should go further. Wherever there are large bodies of land so nearly worthless that they can be bought for a trifle an acre, and yet are adapted to tree-growing, such land should be acquired by the state for its own future welfare, and men trained in forestry should be put in charge of them. In such care these denuded acres would gradually be covered with valuable timber; young trees would be started from seeds, and some protection from forest-fires would be secured. In time the state's forests would be a source of income, though this is a secondary consideration so far as the state's efforts to renew forests are concerned. DAVID.

Ill-Chosen Farm-Home Sites

A drive through any part of the country will usually cause the observer, if he has discernment for the fitness of things, to wonder at the building-sites that have been selected, or at least are now occupied with farmers' home buildings. On the one hand may be seen a dwelling situated at the foot of a slope, where it receives the drainage from the higher ground, upon which there are perhaps stables, sties and stock-yards, while the house grounds and cellar are quite likely to be impossible of good drainage. On the other hand may be seen a house perched upon the topmost point of a bluff or set into a hillside, where the tired housewife and weary workers must climb by stairs or a steep path to and from their work thousands of times yearly.

Some of these sites were no doubt chosen at an early date, when the face of the country was covered with timber and undergrowth, and before permanent roadways were determined upon; but it is true, likewise, that the same mistakes are being repeated with recent locations, where ideal or much superior sites were accessible within a stone's throw on the same property. The reasons for such obvious errors in judgment are frequently not difficult to explain. The important main essentials have been lost sight of, or eclipsed by something quite trivial in comparison, such as a convenient location for a bank-cellar, nearness to a brook, or a favorite nook for a garden.

The importance of a right choice in the matter of selecting a site is almost beyond estimate, often having direct bearing upon the lives of a number of generations.

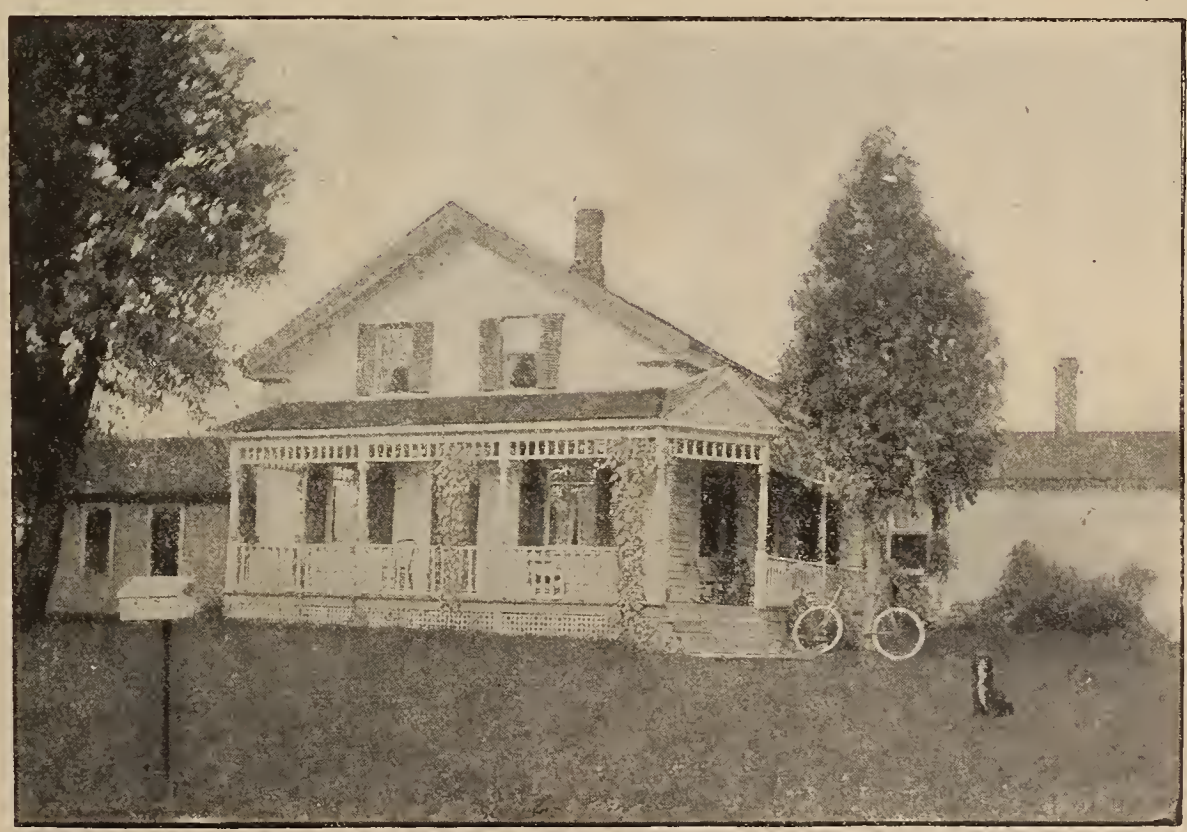
The hygienic and sanitary conditions should, of course, have first thought and count for most. The convenience of approach and general accessibility, with a view to ease of labor, is another weighty consideration, unless the builder has ample means to provide help and labor-savers sufficient to overcome such an objection. Another consideration of scarcely less importance is that of beauty of location and the outlook of landscape and pleasant views to be obtained. It is not often necessary to choose a site on a cliff, ridge or some other inaccessible place to secure a pretty and picturesque location for a farm home. It is more in studying the matter carefully on the ground, with the aid of experienced observers, who should have a touch of the artist in their make-up.

The selection of the outward style of buildings and material to be used are also matters requiring skill, taste and good common sense, no matter if the home to be made will be but humble. These matters of detail are quite like posing and costuming for a portrait or picture in the influence they will exert or inflict upon the owners or passers-by. B. F. W. THORPE.

Canada Field-Peas

The Canada field-pea is a good grower on a great variety of soils, and is probably not as generally cultivated as its worth warrants. Professor Bailey of Cornell says that crops of Canada peas and oats mixed are "well worthy of a place on every farm where stock is kept." Such a mixed crop is valuable for pasture, for use in the silo, and for hay when mature. Professor Bailey further says that when planted in succession of about two weeks, the first planting as early in the spring as conditions will permit, a constant supply of highly nutritious forage greatly relished by stock will result.

The ideal conditions for this crop are mellow, loamy soil, but it will grow fairly well on soils ranging between heavy clay and sand, and produce liberal returns. For early forage that ground should be selected which is moderately open and porous and which can be plowed early. Clayey soils can be used for later plantings. Deep plowing is best. When the land is still rough, as left by the turning-plow, the peas should be sown broadcast, about one bushel to the acre. Then the land should be harrowed and well fined for sowing oats, which at the same time will cover the peas well and give them deep roots. The oats can then be broadcasted or drilled in the usual way, one or one and one half bushels to the acre, according to the richness of the soil. This fodder is peculiarly rich in protein. For the last crop of this succession, barley may be substituted for oats, as barley grows much faster than oats, and is less subject to rust and drought. G. E. M.



A COZY FARM HOME

That Protein Crop

Of course, some day we will all have alfalfa, I hope; but while we are getting it and hoping, we need the home-grown protein crop. Alfalfa sown this spring will make no crop this year. In my latitude it will make as good a crop next year if sown in August, and one can get a summer crop before that. So if the alfalfa shall be sown this spring—and by all means an experimental crop should be—the needs of the current season may be met while it is growing by the crops of Canada peas and oats, and after that crop, one of cow-peas on the same land. You may have plenty of pasture, and think you do not need to supplement it with any other feed, but when the pasture-grass begins to ripen and its general luxuriance to fail, and there is a noticeable falling off in the milk, try feeding green cow-peas, and see if you don't need to give something besides pasture.

I think it pays to buy the protein feeds of commerce when one needs them to feed to good cows, but it is better dairying to keep the home supply of feed so abundant that the purchase is not a necessity. The dairyman feels comfortable if he can say to the bought feeds when they fly their prices beyond the plane of their reasonable feeding value, "Here we part company. I'll meet you when you come down."

W. F. MCSPARRAN.

Good Advice to Cotton-Planters

The United States Department of Agriculture has issued a circular to the cotton-planters in the Southwest, containing the following timely advice, which is especially applicable wherever the boll-weevil has made its appearance:

"Plant early, and secure seed from as far north as possible. Better replant than to defer planting and have the crop mature late. The practice of some planters of making two plantings, to avoid all the work of chopping (thinning out) thrown into a short period, is a very bad policy from the weevil standpoint.

"Under the identical conditions, early cotton of improved varieties has invariably yielded from two to three times as much as native cotton under the same conditions, and in many cases much more. Planted at the same time, the early varieties begin to bloom from twelve to eighteen days sooner than native cotton.

"Fields of early cotton of either native or improved varieties have almost invariably yielded twice as much as late-planted ones."

Post and Pole Timber in Ohio

The Ohio Experiment Station through the Ohio Agricultural Student Union wishes to make a study of the adaptability of the various post and pole timber-trees, such as hardy catalpa and yellow locust, to the different counties of the state.

This work will be carried out by locating in each county of Ohio one, or possibly more, plots of these trees, in order to note under these varying conditions the relative rate and character of growth. These plots will vary in size from one eighth to three fourths of an acre. The trees, as in all other union work, will be sent free of all expense on the part of the farmer making the application. Applications for these test plots should be made to L. H. Goddard, superintendent of coöperative experiments, Washington C. H., Ohio.

Forestry in Ohio

It puzzles me to understand why there should be any thought of creating a state commission or board to look after the forestry interests of Ohio. We need associations to arouse interest among the people, but we do not need more official boards. Our state is now peculiarly well equipped for the promotion of its agricultural interests. The experiment station is engaged in research-work, and believes such work is sufficiently important to engage all its attention; the state university is engaged in teaching, and our state board of agriculture is one of the most efficient executive bodies in the United States.

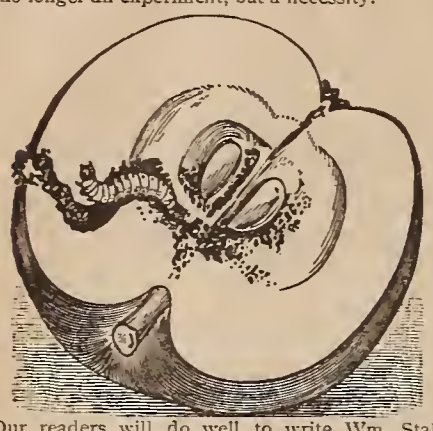
I have believed for years that our people should interest themselves in forestry, and one object of the station board of control in securing the southeastern Ohio test farm was to have a suitable place for forestry experimentation. Now, what is the rational course to be pursued by all friends of forestry in Ohio? It seems clear to me that money for experimentation should be given the station, that the university should be supplied with funds for the instruction of young men in forestry, and that in time our state board of agriculture should be charged with the duty of protecting, so far as it can, the forest-land that remains, and of fostering timber-production. It is the executive body in our state's organized agriculture, and its efficiency commends it to the confidence of all our farmers.—Alva Agee, in National Stockman and Farmer.

Going to a Million

FARM AND FIRESIDE is not all we hope and plan to make it, but see what it gives at this time—good, sound, practical farm talks from reliable authorities whose opinions are respected throughout the United States; the departments of interesting fiction, household matters for the good housewife, for the boys and girls—and if you have read the IMPORTANT ANNOUNCEMENT on the first page of this issue, you will see that all this, and even more than is indicated, can be obtained for only twenty-five cents for the entire year, twenty-four issues, or just about one cent a copy.

SPRAYING FRUIT TREES

The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an experiment, but a necessity.



Our readers will do well to write Wm. Stahl, Box 1, Quincy, Ill., and get his catalogue describing twenty-one styles of Spraying Outfits and full treatise on spraying the different fruit and vegetable crops, which contain much valuable information, and may be had free.

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German Nurseries, Box 3 Beatrice, Neb.

Gardening

By T. GREINER

No Trick at all to figure out (on paper) a crop of two thousand bushels of onions to the acre. The trick is to grow two thousand bushels on a measured acre. There is no record of any grower having quite come up to the figure.

It's Dead Easy for one of the ginseng fellows to figure out or promise the amount of fifty thousand dollars as the returns from one acre of ginseng in five years. If it isn't altogether a different thing in practice, why don't these ginseng-boomers keep still, and make the fifty thousand dollars in five years themselves?

A Ginseng-circular asks: "Why grow strawberries, worry with poultry, or toil in the field under the hot sun, when you can make one hundred per cent more on a small ginseng-garden with half the labor?" We still have to plant strawberries, worry with poultry and toil in the field simply because we want the strawberries, the eggs and chickens and the products of the field, and these things are as good as anything to keep us until we can get that fifty thousand dollars from an acre of ginseng. It may be "long coming," and we have to live in the meantime.

Early Tomatoes.—A reader asks where seed of the Early Michigan tomato can be had. I have looked through a dozen or more leading seed catalogues without being able to find it. No tomato of this name is known to me. Maule's Earliest, Earliana (or Spark's Earliana) and Chalk's Early Jewel are good enough early tomatoes for me. Notwithstanding the unfavorable season last year, the ground where Earliana and Early Jewel were planted was literally red with fruit from along in August until the end of the season.

The Best Potato.—A lady reader in southern Missouri wants to know which is the best potato for her to plant. I am afraid that it would be of little use to her if she were to plant what I select. Bliss' Triumph, for instance, is very popular among Southern potato-growers. I have never been able to do much with it. On the other hand, I like the Early Ohio, yet this is not much esteemed by growers in many other localities. The selection of potato varieties is to some extent a local question. Try Bovee, Carmans and other leading varieties.

Chickweed in the Garden.—J. M. W., a reader in Towas City, Mich., evidently has had some experience with chickweed. "Of all weed and grass pests of the strawberry-grower," he says, "chickweed has caused us more trouble and expense than purslane, redroot and clover all combined. The beautiful carpet will certainly dry up as the hot season comes on, but the new growth from seed is as thick as the hair on a dog's back, smothering the plants and dampening the fruit, producing faded and sickly berries. I do not consider a bed of fruiting plants worth preserving for future bearing if it has been well carpeted with chickweed. . . . A thin covering of salt will kill the chickweed dead as a door-nail, but where the weed is very thick the amount of salt required to kill it is too much for the health of the strawberry-plants." For the larger part of my crop I usually depend on new beds, and for next spring I shall probably pick out a piece of ground not yet infested with chickweed.

Moon Influence.—The poor moon has been made to shoulder the responsibility for a good many things with which it has no more to do than the size of the gull that flies over the Atlantic has to do with that of the lobster in the bottom of the sea. I plant my radishes, peas, potatoes and other things when I get ready, and when the ground is in best order to receive the seed or plant, without reference to "whether the moon is right or not." And I kill my hogs, too, when they are fat enough, and the weather (not the moon) is right for killing. If the pork-fat foams during the rendering process so that, as one of our readers (Bloomington, Ill.) describes it, it can scarcely be kept in the kettle, I believe the cause will be found in the manner of feeding. I have killed hogs year after year (not many in any year, it is true), and have never had the pork "shrink" in the frying-pan, or the pork-fat try to jump out of the kettle, although I have had others tell of experiences of this kind with pork from hogs fattened on beech-nuts, or possibly on clear corn. In order to keep a pig in good health and make first-class pork, the corn ration should be supplemented with something that makes blood and muscle (lean meat), such as oatmeal, milk, bran, and especially soy-beans or peas. I have never heard of pork from pigs fattened with corn and peas "shrinking" in the frying-pan.

Value of Family Garden.—An "energetic woman" who knows the true value of fresh and wholesome garden vegetables asks for my opinion of the farmer who thinks that no person can raise enough vegetables in a garden to pay for his time. I can hardly clothe my decided opinion of such a farmer in polite language. The farmer who cannot afford to spend a little time for the garden is the one who raises eight or ten bushels of wheat and sixty bushels of potatoes, etc., to the acre, and who must plow and sow a great many acres of land in order to raise sufficient salable stuff to pay the interest on the mortgage. He is the man who, when he goes to "town," can spare the money for tobacco, cigars and drinks for himself and a friend or two, and an hour or more loafing in stores and saloons, but who is content so long as his wife and children have pork and potatoes to eat, whether they have a vegetable or berry on the table or not. He is the man who owes the doctor for prescribing for his children's blood, stomachs and livers, all of which might have been kept in first-class working order by regular rations of health-giving, succulent radishes, celery, beets, beans, asparagus, strawberries, grapes, etc. If I visit the farmer who raises thirty or more bushels of wheat and two hundred bushels of potatoes to the acre, whose wife and children are healthy, contented and happy, I know that I can find a good garden somewhere on his place. That is my opinion of the farmer who believes that a garden does not pay and of the farmer who makes it pay.

Fruit-Growing

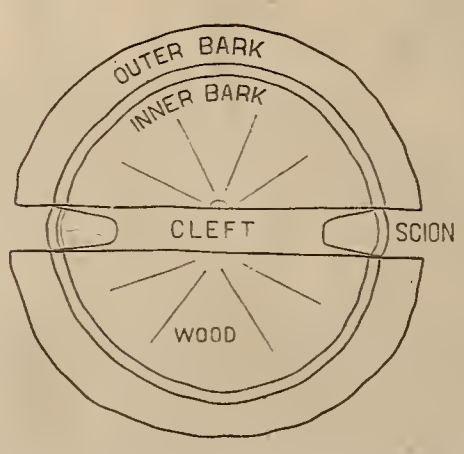
By S. B. GREEN

Cleft-Grafting

"Stock" is the term used to indicate the plant grafted upon, whether large or small.

"Scion" is the term used to express the part inserted, of whatever size or form it may consist. These should be of the new, well-ripened growth of the season. If scions are to be used in the spring, they should always be cut late in the fall. Spring-cut scions may often be used successfully, but it is not safe to trust to them, especially if when cut open the heart-wood appears dark-colored. They should be stored in moist sawdust or sand in a cold cellar, or buried in the ground outdoors, during winter.

The principles which underlie grafting are the same as in budding—that is, the scion and stock must be closely related; the work must be done in such a manner that the inside bark of both scion and stock come closely in contact, and at a season of the year and under such circumstances that they may unite at once



CLEFT-GRAFTING

or as soon as growth starts. The success of the operation largely depends (1) on having the stocks and scions perfectly healthy; (2) in selecting the proper season, which varies somewhat with different plants; (3) in getting a perfect union of the inner barks of scion and stock at least on one side; (4) in making all the cuts with a sharp knife, that the parts in contact may have a smooth surface; (5) in doing the work rapidly, so that the surface may not be dried by exposure.

Grafting-wax is generally used for covering the wounds made in grafting. A good grafting-wax is one that will not become too soft in summer, so as to melt and run down the stock, or so hard in winter as to crack and split off. A very reliable grafting-wax is made by melting together four parts (by weight) of resin, two parts of beeswax and one part of tallow. When well melted, pour into a pail of cold water, grease the hands slightly, and pull the wax until it is about the color of pulled molasses-candy. Make into balls, and store for use. This wax should be warmed when applied. If it is too hard, more tallow and less resin may be used.

Clay is frequently used for covering wounds made by grafting, and it gives quite as good results as any of the waxes if properly applied. For this purpose some very tenacious clay should be used, and it is thought to be improved when mixed with about one third fresh cow-dung and a little plasterers' hair. The whole mass should be thoroughly worked over before using.

Cleft-grafting is a very common form of grafting, and is more universally known and used than any other. It is commonly performed to change the bearing of apple, plum and various other trees and plants. It is generally the most practical method to use on branches two or three inches in diameter, but it also works well on quite small stocks.

Cleft-grafting is performed as follows: The place selected for the insertion of the scion should be where the grain of the wood is straight. The stock is then cut 'square' off with a sharp saw, and is split through its center with a grafting-chisel to a depth sufficient to allow the scion to be put in place. The cleft is held open by the chisel until the scion is cut and inserted, when the wedge is withdrawn, allowing the stock to close on the scion and so hold it in place. If the stock does not spring back so as to hold the scion firmly, it should be tightly drawn together with a string. The number of scions inserted will depend upon the stock. If the stock is not over three fourths of an inch in diameter, one scion is enough to insert, but on larger stocks two may be put in. All the cut surfaces, including the ends of the scions, should now be covered with wax. The scion to be inserted in cleft-grafting should be cut wedge-shaped lengthwise.

Time to Trim Apple-trees.—H. B., Beaver Dam, Wis. The best time for trimming apple-trees where a large amount of wood is to be removed is on mild days late in the winter, and when this is done the wounds should be covered with grafting-wax, white lead or similar material. Light pruning may be done at almost any time, but preferably in June. The worst time for pruning trees is in the spring, about the time that the buds begin to start. Wounds made at this time upon the old growths are very liable to not heal well.

Evergreens for Kansas.—J. T. H., Russell, Kan. In regard to the best evergreens for planting in your section, I am inclined to think that you will find Scotch pine and red cedar most satisfactory. They will grow in any good corn-soil, and the better the soil, the better for the trees. They should be planted early in the spring. There is a sort of general impression abroad that June is the best time to plant evergreens, and while it may be done at that season of the year, yet I have had best success when the trees were moved early in the spring.

Coffee.—A. E. B., Rushville, Ind. I do not know what plant you refer to under the name of "coffee," but the coffee of commerce cannot be successfully grown outdoors in our Northern states. It is very particular about having a rather warm climate, must be somewhat shaded, and not exposed to frost. On that account there is no part of this country where coffee has been grown successfully in a commercial way. Most of the coffee that is used comes from Brazil or Mexico. If you will send me a leaf of the plant which you call "coffee," I can perhaps identify it for you. There are a number of plants sent out by seedsmen which are recommended as a substitute for this plant, and it may be one of these which you have.

Clarifying Cider.—R. E., Aiken, S. C. The use of gelatine for clarifying cider is practised to some extent, as is also the use of blood, lime, plaster of Paris, alum and the whites of eggs. If gelatine is used, it should be in the form of isinglass, which should be dissolved in water or weak boiled vinegar, and added to the cider. The alcohol or tannic acid in the cider will coagulate some of the gelatine, and in falling it will bring down with it the impurities in the form of a sediment. If a cider has but a small amount of spirit or astringent in it, it may not coagulate the gelatine sufficiently, but a good ordinary cider would probably do so. Two or three ounces of gelatine would be enough for a barrel.

This is a time of wonders—and surely there is nothing more remarkable than the fact that this big paper is sent to any home in the United States twice a month, twenty-four times a year, for the small sum of twenty-five cents. How is it done? By the use of the very latest improvements in machinery, we answer. Our readers get the best and the most for the least money.

Poultry-Raising

By P. H. JACOBS

Separate the Breeds

IF THE fowls are running together, this is the time to separate them if eggs from pure breeds are desired for hatching. It will do no harm to allow birds of different breeds to be together if separation is made early in the season. Economy of food requires that all unprofitable members of the flock be removed, so as to give the others more room, for which reason, after the hatching-season is over, the males should be the first to be gotten rid of.

Feeding the Little Chicks

Little chicks, whether hatched under hens or in incubators, are usually fed too often and also too much at a time. They should be given nothing for thirty-six hours after being hatched, as food in their early stages is a tax upon them. The first meal may be pin-head oatmeal and millet-seed, given a little at a time, simply to keep them occupied. The food for the first week may consist of pin-head oatmeal mixed with one third the quantity of millet-seed. Feed every three hours, and never give more than the chicks will eat up clean. After the first week give bread made of equal parts (by weight) of corn-meal, sifted ground oats and middlings, adding a gill of linseed-meal to every quart of the mixture, and also half a pint of ground meat. Cook into bread, and feed three times a day, giving a gill of millet-seed between meals to fifty chicks. Never allow feed to remain over after feeding, as it will become sour. Skim-milk is better than water for mixing the ground food; but if milk is not easily obtained, use boiling water when mixing. Do not omit coarse sand, finely ground oyster-shells and ground bone, which may be kept in little boxes where the chicks can help themselves. All kinds of poultry, old and young, relish a change of food, and even when nothing but grain is allowed, it will be found an excellent plan to make a change every two or three days, instead of using a single kind only. Corn, wheat, oats, buckwheat and barley may be given, and the results will be more satisfactory than when wheat or corn only are allowed, and the hens will relish the variety, have better appetites, and lay more eggs. Green food and meat may also be allowed with advantage, as a complete change to meat, green food and different grains cannot fail to bring good results.

Practical Poultry-Keeping

Because a farmer selects a breed of fowls instead of continuing with common stock is no reason for supposing that he has resorted to "fancy fowls." While a few of the well-known breeds may be more ornamental than useful, there is nothing at all "fancy" in the standard breeds, as they are plain in plumage and also bred strictly on utilitarian lines. Every flock should consist of pure-bred fowls, because each breed possesses characteristics of its own. However, what are termed "show birds" are not always the best of their kind for practical purposes, as they are selected more for their external appearance than for qualifications. It is but proper for every one having a flock to endeavor to combine beauty and utility, as it will cost no more to have beautiful birds than to keep scrubs; but never sacrifice a prolific layer because she may possess an insignificant defect, such as loss of a point on the comb, a spot on the ear-lobe or a colored feather on the back. One may take a male and female, hatch two or three dozen chicks from the mating, yet among the whole number only one or two will be classed as "show birds;" nevertheless, as they will all have the same parents, the discarded birds will be just as well bred as those selected.

Inquiries Answered

INCUBATORS.—C. E. K., Mentone, Ind., desires to know "which is the better, the hot-water or hot-air incubators." It is difficult to give a satisfactory reply, as both styles have advocates and admirers.

SEPARATING BREEDS.—J. L., Dunnsville, N. Y., requests advice as to "when breeds should be separated." It should be done as early as possible, and at least two weeks before using the eggs for hatching.

NO EGGS.—Mrs. D. B., Nevada, Mo., complains that "her hens do not lay. She feeds bran and peelings in the morning, and corn at night." The difficulty is probably due to lack of variety, more meat and less grain being more suitable.

HATCHING YOUNG TURKEYS.—W. H. S., Fielder, S. D., wishes to know "if a turkey-hen will lay another sitting of eggs if the first batch is removed." Something depends upon conditions. Turkeys are frequently deprived of the early laid eggs in order to secure a second sitting.

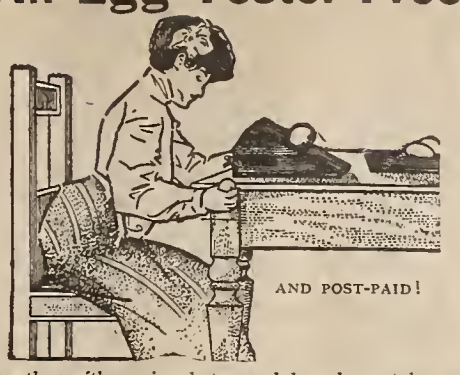
POULTRY-HOUSE.—B. C. W., Mount Vernon, Me., asks "how large a poultry-house and how many hens are sufficient for a beginner to make a business of poultry-keeping." It would probably require from three hundred to five hundred hens; but beginners should start with fifty hens, and increase every year. The poultry-house should allow not less than five square feet to each hen.

FEEDING.—A. W., Berlin, Ont., asks "how and what to feed from chick to maturity, especially for birds that are confined." The inquiry takes in many others, long articles being necessary to give details. In the last issue and in this the matter is discussed, and it is a leading subject in this journal at all times. Climates, breeds, management, etc., must be considered.

A FLORIDA FLOCK OF WHITE LEGHORNS

The trees in the background are called "hog-plum" by the Florida Crackers. They bloom in February, and are then beautiful, being a mass of white bloom. The fruit is about the size of that of the morello cherry, and is very acid in flavor--so much so that it is not pleasant to eat out of the hand. When cooked, however, it is delicious if sugar is freely used in the cooking. When stoned it makes as good a pie as the May cherry. The jelly made from it is equal, if not superior, to that made from the red currant. Some of the fruit are red and yellow in color, while others are as dark or as black as the morello cherry. The stones of the plum-colored are like the stones of the plum, and are not easily separated from the flesh. The dark have a true cherry-stone, and are as free from the flesh as the stone of the cherry. The flavor of the cooked fruit is a compound of that of the plum and the cherry. When the frost does not interfere, the trees are loaded with fruit. Bees feed upon the nectar of the bloom, and the chickens tumble over each other to get the fruit when it drops.—G. W. Harris.

An Egg Tester Free



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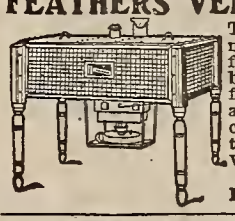

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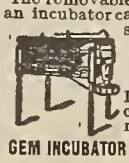

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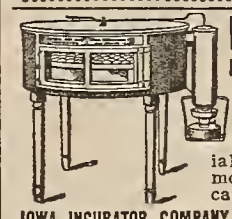

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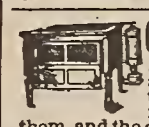

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Inner can detachable, double the cream gathering power of any other, no water in the milk, more cream, more and better butter, pure milk for table and stock, easily cleaned, greatest labor saver ever used on a farm. Free catalogue. Price the lowest. Agents wanted.

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THE MILK SUBSTITUTE
"There is nothing like it to raise thrifty Jersey Calves."
ABA B. GARDNER, ESQ., GLENCOE, MD.
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Does all kinds of light and heavy stitching. Does all kinds of light and heavy riveting.
A PERFECT HAND SEWING MACHINE AND RIVETER COMBINED
IT SEWS IT RIVETS
A STITCH IN TIME WILL SAVE A DIME
WILL SAVE THE PRICE OF ITSELF MANY TIMES A YEAR.
To show it means a sale. AGENTS MAKE FROM $3 to $15 A DAY. One agent made $20 the first day, and writes us to hurry more machines to him. Write for terms to agents.
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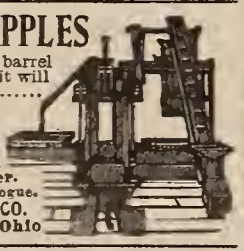

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25 designs, all steel. Handsome, durable.—Cheaper than a wood fence. Special inducements to church and cemeteries. Catalogue *free*.
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427 North St.,
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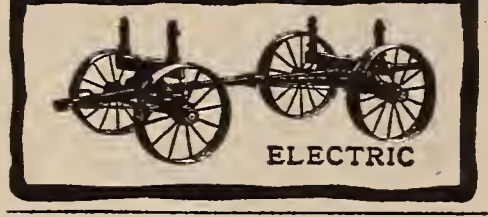
We have sold up to date more than a million and a quarter light draft, wide tire, low steel wheels. We are making more of them than any two other factories.

Several hundred thousand farmers who are using them say they are the best by every test. Does that mean anything? It means just this:

ELECTRIC Steel Wheels and the ELECTRIC Handy Wagon

have proved themselves to be superior to any other. No living man can build a better. We make them ourselves, by our patented process. They are made right. We give them the strongest possible guaranty. You run no risk in buying them. The spokes are united with the hub and simply can't work loose. They last a lifetime without repairs. Don't go on breaking your back loading high wagons and rutting your fields with narrow tires. Don't be persuaded into buying a makeshift. Get the best while you're at it. It costs no more. Send for free catalogue and use your own judgment.

ELECTRIC WHEEL COMPANY,
Box 96 Quincy, Ill.



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WHY buy a second or third-class Cream Separator merely because it is well advertised or some agent talks well for it to earn a fat commission for himself?

Every well-informed buyer knows that the De Laval machines are in a first class by themselves. The original machines' improvements have always kept them well in the lead. Other machines are merely cheaper-made imitations and partial copies to the extent expired patents make possible.

But other machines lack the patent protected features necessary to perfect separation, slow speed, easiest running, and are so poorly made as to surely not last half as long, while moreover the De Laval machines are cheapest in proportion to actual capacity.

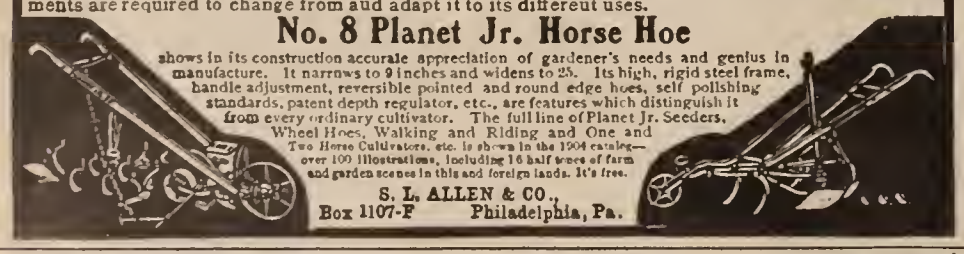
So why take any chances? Send for a De Laval catalogue and the name of nearest local agent.

THE DE LAVAL SEPARATOR CO.
CHICAGO Randolph & Canal Sts. | NEW YORK 74 Cortlandt Street

No. 25 of the Planet Jr. Family.

Below on the left is a tool after the gardener's own heart. It is adapted to almost every sort of garden work, being a Hill and Drill Seeder, Hoe, Cultivator and Plow combined. Plants seeds just as wanted, does exact and nice cultivating of every sort, throws earth to or from the row and works equally well between or straddling the rows. Its crowning virtue is that but a few moments are required to change from and adapt it to its different uses.

No. 8 Planet Jr. Horse Hoe



shows in its construction accurate appreciation of gardener's needs and genius in manufacture. It narrows to 9 inches and widens to 25. Its high, rigid steel frame, handle adjustment, reversible pointed and round edge hoes, self polishing standards, patent depth regulator, etc., are features which distinguish it from every ordinary cultivator. The full line of Planet Jr. Seeders, Wheel Hoes, Walking and Riding and One and Two Horse Cultivators, etc. is shown in the 1904 catalog—over 100 illustrations, including 16 half tones of farm and garden scenes in this and foreign lands. It's free.

S. L. ALLEN & CO.,
Box 1107-F Philadelphia, Pa.

SAVE 20 CENTS PER SHEEP ON EVERY SHEEP YOU SHEAR WITH
Stewart's Improved 1904 Sheep Shearing Machine
PRICE ONLY $12.75
The day of the old-fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done for nothing. Don't butcher your sheep. Shear with machines and get one pound of wool extra per head. It will more than cover the cost of shearing. Send today for valuable book, "Hints on Shearing." It is free and will save you money.
CHICAGO FLEXIBLE SHAFT CO., 210 Ontario Street, CHICAGO.

Live Stock and Dairy

The Shying Habit—Cause and Cure

A DRIVING or riding horse which forms the habit of shying is a constant menace to safety, whether he is by nature vicious or kind. Shying is nearly always a growing habit which if not overcome gets to be chronic and difficult of cure. The animal affected will often seem to go out of his way searching for or inventing bugaboos to furnish an excuse for shying or bolting.

The well-bred and high-spirited animal of mixed breeding is more liable to form the shying habit, but there are occasional cases where veritable deadheads under ordinary circumstances become the most unmanageable of shyers and bolters after they have developed an unreasoning fear of some commonplace object, as a certain shaped or colored stone or plant, the drooping leaves of the mullen or plumes of the goldenrod.

Whatever the cause of the shying, it nearly always has its beginning in improper or careless handling when the animal is feeling very fit and "toppy." Sometimes the habit originates through some imperfection of sight which causes objects to look distorted and terrifying. Again, a colt will form the habit of shying at some particular and even well-known object, simply because he feels disturbed and lonesome from being kept from his companions and accustomed surroundings. In some cases among older animals it is not fear, but simply a nervous condition, which prompts them to wish to get into a mix-up; and if persisted in, and an advantage is gained over the driver occasionally, the chance for a tilt and a bolt gets to be enjoyed.

As to remedies, the best is prevention or overcoming as soon as possible after the trait shows. First ascertain that it is not a result of defective eyesight. If the animal is a colt, nervous and timid, hook him double with a well-mannered horse until he gets waywise. Should he continue to show fear of some object, induce him to get a satisfying knowledge of its harmlessness through both his senses of sight and smell. Do not attempt to force his acquaintance of it suddenly. Lead the way yourself, and handle it; do not force him to it under the whip.

It is more often the colts that are entirely country reared and broken which give the most trouble from shying. When driven in town or city from the start their attention is divided and diverted by so many sights and sounds as to cause little notice to be paid to anything but their driver's wishes.

There are occasional cases among older horses where the shying is caused by none of the causes mentioned, but is simply a headstrong challenge to try conclusions with the driver. Where such a condition is proved, it will be advisable to have a reliable and expert horseman try heroic measures by using strong harness and rigging and a bit that will afford complete mastery over the animal. Then when an attempt is made to shy and bolt, let a convincing introduction to a first-class whalebone be judiciously, but not brutally and blindly, applied. A treacherous, unsafe animal can thus be sometimes made to see the unwisdom of his ways when kindness alone fails entirely. The best cure for the generality of early and slight attacks of the shying habit is sufficient and regular road-work to keep the animal's nervous and muscular tension down to a normal condition.

B. F. W. THORPE.

Schmidt Treatment for Milk-Fever

"Please give me, through your paper, the new treatment for milk-fever from Denmark." V. BROS.

Grand Rapids, Mich.

ANSWER.—Dissolve two and one half drams of potassium iodide in one quart of water which has been previously boiled, and keep the solution as nearly as you can at the temperature of the body blood. Then milk every drop of milk from the cow's udder, and clean with soap and water; when dried, disinfect the udder and teats with an antiseptic solution. Then take a small glass funnel, and attach to it a rubber hose about four or five feet long; affix to the end of this hose an ordinary milking-tube, insert the milking-tube into the teat, and slowly pour in your solution, dividing it equally between the four teats. When this is done, apply massage to the entire udder for five or ten minutes every hour, until the cow comes to her feet. Do not allow the calf to suck during the time the cow is being treated. If the cow is costive, remove the contents of the rectum by hand. In case of a weak heart, small doses of aromatic spirits of ammonia may be given with water every hour; avoid large, bulky doses of any kind, or your patient may suffocate from the same. If your patient is not on her feet in eight or ten hours, the above dose may be repeated, but it is rarely necessary. This is practically the Schmidt treatment, and is almost a specific.

The writer has treated one hundred and sixty-seven cases of milk-fever from January 1, 1903, to January 1, 1904, with the above treatment, out of which only six cases proved fatal, and one hundred and sixty-one made nice recoveries. It has been demonstrated to the veterinary profession that the potassium iodide in this treatment is not responsible for its success, but that the oxygen administered with the solution deserves the credit.

We therefore concluded to make an experiment with two cases in which the potassium iodide was entirely omitted, otherwise the above treatment being carried out to the letter, with the exception that a little more air was allowed to enter the udder while injecting. Both of these cases recovered, and are giving their usual flow of milk.

Pure oxygen is being used with good results in the treatment of milk-fever, but if it can be administered with the water in the form of air, as above described, it is surely cheaper, and it is at hand at all times.—Doctor Hartwig, in Hoard's Dairyman.

Shelter the Pigs

On most farms the swine are regarded somewhat as a by-product, and the attention that their importance in farm economy deserves is not given them. Of course, there is no reason why the farmer should be more careless with or wasteful of a by-product than a manufacturer is, but that he is so is plainly written in all our farming history—that is, if we have any written history.

On many farms the pig is half an outcast. He is fed the leavings, and often his drink is fit only for the compost heap or to put out a fire. When the winds and rains and sleets and snows come around and over and through him, he is welcome to a good shelter if he can find it. The best he can find is usually leaky overhead and saturated beneath. If corn is high, he is put on short rations through the winter, and merely kept alive until spring. If his immediate destiny is the market, of course the corn allowance is increased, but the shelter is seldom improved.

One of the important things in animal husbandry that stockmen are slowest to learn or put into practice is that heat and animal vitality are produced, and hence maintained, by the feed eaten. The cold, unbroken wind that blows away the bodily heat from the animal is blowing away as much feed as was required to produce that heat, plus the energy that was expended by the animal extracting the heat from the feed.

Now, I know there is a time-honored notion—and even old things are not always entitled to our respect—that exposure is conducive to healthfulness, and that to make an animal strong and robust and long lived one needs to train its muscles by letting it shiver, or develop its bone by forcing it to move on to keep from freezing, to let every cold wind blow around it for the fullest lung-expansion. But we are not so much interested in the long life of the pig as we are in his profitable one, so we can afford to make him more comfortable for the sake of more profit.

At the Kansas Agricultural College two lots of hogs were fed. One lot was sheltered in a warm basement, the other was kept in an open yard with a board fence on the north. The hogs in the barn consumed two thousand eight hundred and seventy-eight pounds of feed, and gained six hundred and four pounds during the trial period of ten weeks, the amount of feed required for one hundred pounds of gain being four hundred and seventy-six pounds. The ones in the exposed yard consumed two thousand eight hundred and forty-four pounds. They made a gain of four hundred and seventy-nine pounds, and required five hundred and ninety-three pounds of feed for one hundred pounds of gain, or about one fourth more feed for one hundred pounds of gain than the sheltered lot. The hogs were Berkshires, weighing from two hundred to two hundred and fifty pounds each, and were evenly divided into two lots of five each.

W. F. MCSPARRAN.

Yes, we mean to send you and your friends FARM AND FIRESIDE for a whole year for twenty-five cents, twenty-four big numbers, two each month.

5 + 1 = 6

A No. 1 National Cream Separator will give as much cream from *five* cows, as old setting methods, or cheap separators will get from *six*. If you own five cows and are thinking of buying another, it would be true economy to purchase a No. 1 National instead. It reduces labor, saves time and increases profits. Capacity 375 lbs. an hour, or about 10 gals. every 15 minutes. Runs lightly and easily cleaned. Simple construction and few parts is the secret.

NATIONAL
Cream Separators

are made for every day use, *and meet every demand of the practical user.*
The price of the No. 1 National is $85. Impossible to get as good for less, or a better for more. Send for free booklet No. 31 It tells facts you'll be glad to know. *Write to-day.*

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HE PAYS THE FREIGHT
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BEST LOWEST PRICES. ASTONISHING
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FOR VALUABLE INFORMATION SIGN AND MAIL THIS COUPON OR SEND A COPY ON POSTAL. NOW

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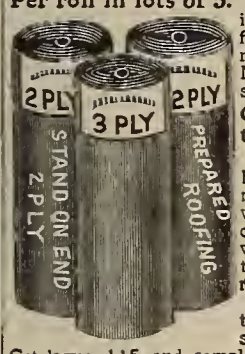
Felt Roofing 65c
Per roll in lots of 5. This is by far the most popular roofing on the market More than 40,000 rolls sold by us last season.



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Send for full description, instructions and sample of the roofing. Catalogue 115 and samples sent gratis. Our prices quality considered, are absolutely lowest. Write today. Save dealers' profits. Address 64

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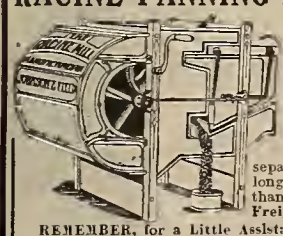
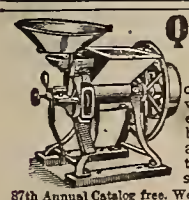


We give you this celebrated mill, free of all costs, for your assistance in introducing the mill in your locality. This mill has been a leader for 25 years. Lighter running, larger capacity, more perfect separation, greater strength, longer life and more uses than all others. We pay Freight 500 Miles.

REMEMBER, for a Little Assistance we will send you this Fanning Mill ABSOLUTELY FREE. Write to-day.

JOHNSON & FIELD MFG. CO., Dept. J, RACINE, WIS.



Quaker City Grinding Mills

crush and grind ear corn, mixing in as wanted all small grains, and do it faster and easier than any other. Ball bearings make light running. Make an excellent table meal. Time given to prove these things. If you are not satisfied return and we pay charges.

87th Annual Catalog free. We sell gas and gasoline engines and other powers.

The A. W. Straub Co., 3737 Filbert St., Philadelphia, Pa. Canal & Randolph Sts., Chicago, Ill.

GARLIC IN THE MILK

Whether trouble comes from the pasture or hay, the effects of garlic and ragweed are killed

BY FEEDING COWS
KELLOGG'S Condition Powder.

No trace of either appears in milk or butter. The unfailing remedy of dairymen and stock raisers for Abortion, Barrenness, Retention of Placenta, all Breeding Troubles. Write for free booklet.

H. W. KELLOGG CO., Dept. F, St. Paul, Minn.

"Buy Direct" INGERSOLL'S
MIXED PAINTS

From factory at WHOLESALE PRICES. For Houses, Barns, Roofs, all colors, and SAVE Dealers' profits. In use 62 years. Officially Endorsed by the Grange. Low prices will surprise you. Write for Samples.

O. W. INGERSOLL 260 Plymouth St., Brooklyn, N. Y.

Live Stock and Dairy

The Seven Ages of a Race-Horse

First, the foal,
Wabbly, and nursing at its mother's side;
And then the whinnying colt, with gentle eyes
And softly floating mane, frisking in paddock,
Nibbling luscious green. Then comes the saddle,
Fiercely fought at first, with many a kick.
But later borne with grace. Then daily training,
Months of pampering care, and trials on a track,
Traveling, and racing under clever hands,
Eager to records make or break,
Win cup or land fat purse. And then a mishap,
Tendon strained, and as a "selling plater" bartered;
His days of money-earning nipped in bud.
For him no more the soft caress of hand.
And he has played his part. The sixth age shows
The horse of gentle breed docked, and drawing cab
With weary stride, eyes bulging, and mark of whip
On his shrunk shank; and the full, deep breath,
Once drawn in measure strong, labors
And whistles in its sound. Last scene of all,
That ends this strange, pathetic history,
For which 'twere mercy to implore oblivion,
Sans tail, sans sight, sans strength, sans everything.

—Florence M. Blair, in the Rider and Driver.

Ohio Dairymen Meet

About two hundred and fifty of Ohio's progressive dairymen met at Ohio State University January 27th-29th. The meetings were interesting throughout, and the discussions animated.

"The consumption of milk will increase," said Professor Lane of the United States Department of Agriculture, "as people become educated to its value and a better quality is produced. Milk must be rich, pure, wholesome. There is no secret in the production of such milk. There must be absolute cleanliness of cows, stables and workers. The cows must be healthy, and the stables should be well lighted and ventilated. Another important essential is rapid cooling. Milk shipped from the United States to the Paris Exposition in ordinary milk-cans, protected only with two caps and paraffin-paper, kept sweet from sixteen to eighteen days without pasteurization, sterilization or any chemical treatment. When it was found that the long-keeping quality was due entirely to rapid cooling and cleanliness, the producers were awarded three gold and silver medals. Aim at uniformity. It costs more to produce a product with four per cent guaranteed butter-fat, but a discriminating trade will pay it. Keep out impurities instead of concealing or destroying by pasteurization and sterilization."

Professor Decher of the Ohio State University pointed out the difficulties in producing standardized milk, saying that in a herd of thirty or forty cows the fat content will vary from three to four per cent from day to day. Then the overrun of fat will benefit the consumer without a corresponding benefit to the producer. Ohio's laws forbid the addition of skim-milk to reduce the overrun.

J. Moldenhower spoke of the advantages of rapid cooling, and quoted H. B. Gurler, of Illinois, who won gold and silver medals at the Paris Exposition, and who sells certified milk at fifteen cents a quart, as saying that "with milk obtained from sanitary stables it is preferable to cool under a closed cooler, free from exposure to air. Taken immediately from the cow, I cool it from ninety degrees Fahrenheit to forty degrees Fahrenheit in less than one minute."

Professor Lane's address, illustrated with stereopticon views, was excellent. "On land which formerly required four acres to one cow," said he, "by soiling and silage we are able to keep three and one fourth cows on one acre for six months. For six months the cows were fed in a well watered, drained and shaded field. The feed was hauled in on low wagons. For early spring, rye, wheat and clover were fed; for summer, cowpeas and soy-beans: for fall, corn, grasses and barley. Millets and alfalfa were also used. The aim was to furnish a varied and palatable diet high in nitrogen. There were ten acres in cultivation, producing one and one half tons of feed a day for fifty cows, or two hundred and seventy tons for the season. On part of the ground two or more crops were grown. The land was plowed deep once, and future preparation was with a four-horse right-lap disk-harrow. Comparing the soiling period with the silage period, it was found that three thousand four hundred and fifty-seven pounds of milk, or one hundred and seventy-three and eight tenths pounds of butter, was the average for each for six months soiling period. For silage, the average was

[CONCLUDED ON PAGE 9]

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Spavin

Bone Spavin, Bog Spavin, Ringbone or any kind of blemish—we have what you need to make a certain cure. Guaranteed always—money right back if it ever fails.

Fleming's Spavin Cure (Liquid)

for the soft bunches—Paste for the hard ones. A 45-minute application and the lameness goes. Lots of blemish information in the free book we send.

Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in fifteen to thirty days.

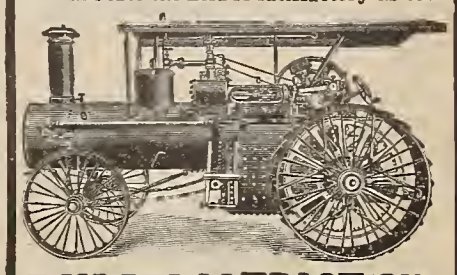
Fleming's Fistula & Poll Evil Cure

is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Write for our free book on diseases and blemishes of horses.

FLEMING BROS., Chemists, 224 Union Stock Yards, Chicago, Ill.

THRESHERMEN

have come to realize the fact that for efficient and permanent service, there is no power they can take into the field so satisfactory as the



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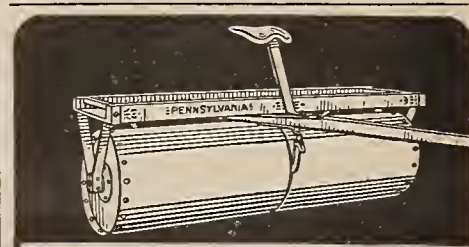

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Land rollers make better crops. You can increase the yield of any piece of land by proper use of a roller.

The Pennsylvania
Steel Head and Rim Roller

will more than pay for itself in one season by the increase in crops. It is the best roller on the market. The solid steel heads completely closing the ends of the cylinder, prevent dirt and trash from accumulating in the shell and give a rigidity that is not attained in other rollers. Our illustrated circular, sent free on request, tells all about the merits and construction of our rollers and gives the various sizes. Also contains complete price list. Send for it.

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Farmers' Handy Wagon
With 4-Inch Tire Steel Wheels

Low and handy. Saves labor. Wide tires, avoid cutting farm into ruts. Will hold up any two-horse load. We also furnish Steel Wheels to fit any axle. Any size wheel, any width of tire. Catalogue free.

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DEATH TO HEAVES! NEWTON'S

Heave, Cough, Distemper and Indigestion Cure will effect a permanent cure for the ailments named. Recommended by veterinarians and owners. Every druggist in America has it or can get it.

Send for Booklet.

$1.00 per can, at dealers, or by mail or express prepaid.

THE NEWTON REMEDY CO., TOLEDO, OHIO.

IWANS' CONCAVE DRAIN CLEANER

Adjustable or Stationary

Absolutely necessary for every ditching outfit. Best tool on the market for finishing tile ditches. Makes smooth, level trench for laying the tile evenly and with close joints. Sizes 3 to 8 in., 6 ft. handle. Sold by hardware and implement dealers. Write us for illustrated circular of Post Hole Augers and Diggers, Serrated Hay Knives, etc. IWAN BROS., Dept. H, Streator, Ill.

MAKE MONEY

pulling stumps, grubs, etc., and clearing land for yourself and others. Hercules Stump Puller is the best.

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FREE TRIAL of the BEERY BIT

Even a Lady can hold an ugly horse. Cures kickers, shyers, runaways etc. FOUR bits in one. TEN days TRIAL. PROF. J. B. BEERY, Pleasant Hill, Ohio.

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Don't pay double prices, when a postal will bring you our free Implement Catalogue No. 145, just off the press, completely illustrating and describing all the new and approved tools for 1904. We sell only reliable well tested implements, each one designed for a certain use and guaranteed to do what it is intended for, as well or better than any other similar make. Every implement selected and approved by Mr. F. L. Shaw, for eleven years Manager of D. M. Osborn Implement Company, now Supt. of ever-growing Implement and Vehicle Division. Mr. Shaw believes that quality is more important than price and in preparing catalogue No. 145, has been careful to select only the finest and best tool of each kind. The leading manufacturers of the United States make our goods; some we make ourselves. Our implements are in use everywhere, satisfying others, and we know they will satisfy you. Write at once for our free catalogue No. 145. It illustrates, describes and prices almost every kind of a farm tool or implement known, from the Midget 60c. corn sheller to the well-known Banner Disc Harrow. We have steel beam plows as low as $8.30, cultivators for $9.25, corn sheller for $4.10, harrows at $8.75, gas engines $74.50, all honestly made, correct in design and guaranteed to please. Let us send you a catalogue and you can see for yourself. You can look over the entire lines, compare our prices and see for yourself that we can save you anywhere from 15 to 40 per cent.; catalogue also gives freight rates, explains our ship on approval plan, contains order blanks and gives much desirable information. The spring edition is now ready. Ask for Implement catalogue No. 145. Address

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BLIZZARD STORM FRONT

Patented in United States and Canada.

Fits any buggy. Adjusted in 30 seconds without getting out, sides open and close easily, large line pocket, Window, 12x20 inches, of pliable material that won't break. Rubber cloth, $3.50; heavy rubber cloth, $4.00. Trade-mark "Blizzard" is stamped on inside under window. If your dealer hasn't it, write us. Illustrated booklet free. Vehicle Apron & Hood Co., 203 E. Rich Street, Columbus, O.

AGENT WANTED

Good man in every county to sell

Osgood Standard Scales
for Store, Factory and Farm

Most complete line made. 1903-4 Patterns Steel Lever Stock Scales are beauties. Prefer man experienced in selling machinery and implements. Fine catalogue. No samples. Can be handled nicely as side line. Liberal contract. Exclusive agency. Have you that man in mind? Show him this paper. He can make money. We want him now. Act quick.
OSGOOD SCALE CO., 75 Central St., Binghamton, N. Y.
Largest makers of Farm Scales in this country.

SAW MILLS

The DeLoach Patent Variable Friction Feed Saw Mill with 4 h. p. cuts 2000 feet per day. All sizes. Shingle Mills, Planers, Trimmers, Corn and Buhr Mills, Water Wheels, Lath Mills, etc. Fine catalogue free.
DE LOACH MILL MFG. CO.
Box 300, - - ATLANTA, GA.
Meet us at St. Louis

Spray Pumps

Save your fruit and MAKE YOU MONEY. **"THE DAISY"** is 15 years old, and 200,000 in use. Has every improvement—rubber hose, perfect nozzles and valves. No. 1, tin, $1; No. 2, iron, $1.50; No. 5, all brass, $4. Agents Wanted. Catalogue Free.
HURRAW & SON, Box A, Wilmot, Ohio

These Small Fruits 35c

Model small garden collection of strong, well rooted plants, prepaid. 6 Echo Strawberry, 2 Eris Blackberry, 2 Wood's Cuthbert Raspberry, 1 Fay's Currant, 1 Concord Grape. Ask for general small fruit catalogue, also special circular of 12 Bargain Fruit Collections. Sent free on application.
ALLEN L. WOOD, Wholesale Grower, Rochester, N. Y.

GOV'T AUCTION SALE CATALOGUE GUNS Pistols, Military Goods (Illustrated), 15c., mailed 6c. stamps. F. Bannerman, 579 Broadway, N. Y.

The Grange

By MRS. MARY E. LEE

The Experiment Station Goes to the Farmer

THE Ohio Experiment Station is making every effort to inform us along every line of crops, soils, stock, feeds and horticulture. The necessity of investigation in the latter field, with scientific advice as to the myriad pests and diseases now attacking the fruits and foliage of Ohio, is becoming more apparent to all. The question of adaptability of soil and climate to the various crops can be settled by the individual farmer only by costly experiments, if at all. The "Student Union," composed of the alumni and present students of our agricultural college at Columbus, now proposes to coöperate with the state experiment station in an effort to take the station to every farmer in the state who has the ambition to ask for this assistance and the enterprise to carry out experiments and report results under the instructions of the station.

The "Student Union" is now ready to send to a large number of farmers different varieties of seed, with the required fertilizers, to make a test at home on plots of one by two rods. There are thousands of Ohio farmers who would like to know whether alfalfa, cow-peas, soy-beans, certain varieties of corn, etc., would thrive on their particular farms, yet who do not feel like making the outlay for experiment, nor know just how to get at it.

To all such let me say that full instructions, with seed and fertilizer, will be sent to all or any so long as the fund for this purpose lasts. The legislature will be asked at the present session to place a reasonable amount of money at the disposal of the station, to send to all the equipment to carry out experiments of the above kind. Farmers may assist in this appropriation by commending the station and its work to their respective members of the General Assembly. In the meantime send to Prof. Chas. E. Thorne, Director, Wooster, Ohio, for circular of information concerning the "Student Union" and its work, and requesting such seed as is desired. The applications will be filed and sent in order so long as the fund for this purpose allows. Should the legislature recognize the importance of this work, and make it possible, all applications will be supplied. It is the hope of the union, as well as the station, that by this means farmers will be saved thousands of dollars in experiments, and at the same time encourage a wider diversity in crops, and consequently a more profitable agriculture. Send now.

F. A. DERTHICK,
Master Ohio State Grange.

National Educational Association

The session of the National Educational Association held in Boston last July was one of the most successful meetings, both as to membership and value of papers and discussions. One thousand and thirteen new members were enrolled, bringing the total membership of this powerful body up to thirty-two thousand seven hundred and fifty-seven. The power this organization exerts on educational matters is wonderful. It would be well were more of our better class of country teachers enrolled as members. Their efficiency in a public way would be increased many fold.

The educational problems of the country are fully as great as those of the city. The need of advanced legislation and of the creation of an enlightened public sentiment are just as imperative. Moreover, there is need of a powerful organization to emphasize the new ideals. The National Educational Association is composed largely of the teachers of advanced schools, and would be of vast benefit to the township and high school teacher. The membership fee is two dollars, which entitles members to all the publications of the society. The Journal of Proceedings alone is worth this.

The time is not far distant when the grange and the National Educational Association, both powers in their respective fields, will join forces in the solution of rural-school problems. In the meantime let the progressive country teacher ally himself with this potent factor in school matters.

Opportunities in Agriculture

Four of the students in agronomy at the Ohio State University, class '04, passed the civil-service examination, and were tendered positions in the United States Department of Agriculture, at salaries of one thousand dollars a year. Two of the boys were undecided as to acceptance, for they saw better opportunities in going back to the farm for practical work. In how many businesses can the self-educated boy afford to decline a salary of one thousand dollars per annum to return to the business with probably not more capital invested than three or four times the salary? It matters not in what line of farming one may engage, there is ample opportunity for the best talent, with satisfactory financial returns, if it is wisely and intelligently used. It is a matter of deep significance that young men who take a course in agriculture, for the purpose of teaching or filling some of the numerous clerical positions open to agricultural graduates, go back to the farms and make successes thereon.

"The fact is," said Dean Price of the Ohio State University, "our young men cannot afford to accept clerical positions. Senator Dunlap could ill afford to take a situation carrying a two-thousand-dollar salary."

And yet there are hundreds of young men who think they cannot afford a course of study at a good agricultural college.

Traveling Libraries

The state library sent two sample traveling libraries to the Ohio State Grange. They met with the hearty approval of the members, and blanks were distributed to interested parties.

This important arm of the state library is under the direct management of Mrs. C. B. Galbreath, a woman of rare tact and discernment, whose entire interest is in her work. She has built up one of the best systems of traveling libraries in the United States. All requests for books are given her personal attention, and the suggestions followed as closely as possible. It is not always possible to fill orders as received—the books may be out; but so far as is possible, every suggestion made by a local club or grange is heeded. Mrs. Galbreath deserves the hearty support of every Patron in her untiring efforts to place before the public the best books at the least cost.

The Observatory

Geauga County, Ohio, now has a large grange in every township.

Grange-work is being pushed rapidly in different sections of the United States. The grange is recognized as the spokesman of the farmer.

If one tenth of the members of the grange fully realized what the order means to humanity, and would work, there would be an outpouring of grange spirit that would reanimate the land.

One would travel far and long to find a more alert, businesslike, keen, intelligent convention of any class than that which gathered at the Ohio State Farmers' Institute and Board of Agriculture meetings early in January.

The longer I live, the more convinced am I that we should embrace the sweetness and beauty of life as it is presented to us. Half of our sorrows are miscreate, and the other half might easily be alleviated did we pay heed to the soft ministrations Nature would yield.

"The farmers of Montana and Wyoming are waking to the notion of organization," said Prof. John Hamilton, Washington, D. C. "Quite the most inquiries for grange literature come from Montana and Wyoming," remarked National Secretary Freeman. See?

"I have more inquiries for grange literature this season than ever before," said National Secretary Freeman. "I respond promptly to all inquiries, and there is a large increase in granges and membership over the corresponding period last year. The growth is steady and fast."

The Journal of Proceedings of the National Grange is ready for distribution. It is in pamphlet form, and contains one hundred and fifty pages, size six by ten. It is far more convenient and easier of reference than the old style. Copies may be obtained from National Secretary C. M. Freeman, Tippecanoe City, Ohio.

Hang pictures in your grange hall. Put therein a grange library. Arrange cozy-corners. Add a few comfortable chairs. Let the lights shine out clear. Make the grange hall the center of the intellectual and social life of your community. Furnish games and music to beguile the tedious hours. Count no effort lost that is conducive to a happier, higher, holier life.

AN EASY MARK FOR THE STEVENS

Spring days here, and we feel again the thrill of new life—the desire to take a gun and "get out of doors."

SEND FOR OUR BOOK

It tells all about the "Stevens"—how to care for it, target shooting, hunting, etc.
J. STEVENS ARMS AND TOOL CO.
835 Main Street
Chicopee Falls, Mass.
If dealers won't supply, we sell direct.

Salzer's National Oats

Greatest oat of the century. Yielded in 1903 in Ohio 187, in Mich. 231, in Mo. 255, and in N. Dakota 310 bns. per acre. You can beat that record in 1904!

For 10c and this notice

we mail you free lots of farm seed samples and our big catalog, telling all about this oat wonder and thousands of other seeds.
JOHN A. SALZER SEED CO.
La Crosse, Wis.

FERRY'S SEEDS

Deserve your confidence. They have never failed—won't fail now. Sold by all dealers. 1904 Seed Annual postpaid, free.
D. M. FERRY & CO.
Detroit, Mich.

SHETLAND PONIES GIVEN AWAY

Everybody should send for my 1904 Seed Catalogue and see how Shetland Ponies can be had free. Catalogue full of Seeds, Plants, Bulbs, Flowers. Special Offers, 18 Breeds Poultry; colored plates; hundreds of illustrations and 10c cash coupon, worth 10c to all, for only 5c. Send for it to-day.
F. B. MILLS, Seedsman, Box 99, Rosehill, N. Y.

AUTO-POP, AUTO-SPRAY.

Great cleaning attachment on perfect compressed air sprayer. Note how easy—cleans nozzle every time used, saves half the mixture. Brass pump, 4 gal. tank. 12 plunger strokes compresses air to spray ¼ acre. We manufacture the largest line in America of high grade hand and power sprayers. Catalog free.
E. C. BROWN & CO.,
279 State St., Rochester, N. Y.

SPRAYING

brings fruits and flowers. We make the right appliances. Special adaptation to every need.
HAND, BUCKET, BARREL KNAPSACK and POWER SPRAYERS.
20 styles. Nozzles, hose, attachments, formulas, every spraying accessory. Write for free catalog.
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Western Agents, Henton & Hubbell, Chicago.

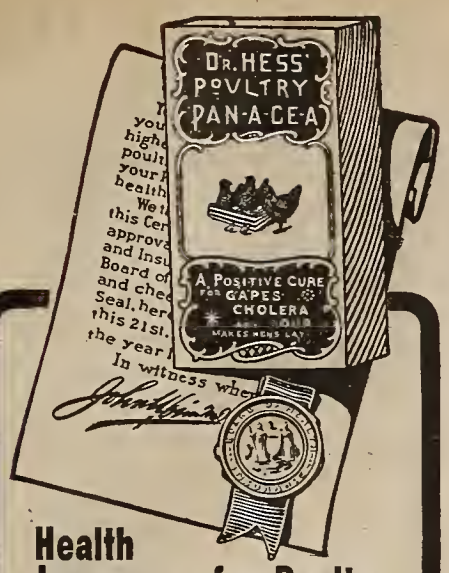
SPRAY with EMPIRE the KING or ORCHARD MONARCH

PERFECT AGITATORS with Automatic Brush for cleaning strainer. No leather or rubber valves. All styles of Spray Pumps. Book free. "No swindled feeling if you use our pumps."
Field Force Pump Co. 509 11th St. Elmira, N.Y.

450,000 TREES

200 varieties. Also Grapes, Small Fruits etc. Best rooted stock. Genuine, cheap. 2 sample currants mailed for 10c. Desc. price list free. LEWIS ROESCH, Fredonia, N. Y.

STARK TREES best by Test—78 YEARS. We WANT MORE SALESMEN PAY CASH Weekly
Stark Nursery, Louisiana, Mo.; Dansville, N.Y.



Health Insurance for Poultry

We guarantee to make hens lay and to keep your chicks healthy, for a penny a day for each 40 chicks, if you will regularly feed Dr. Hess Poultry Pan-a-ce-a. Every package is an insurance policy on the life of your poultry; on the health of every chick. Poultry Pan-a-ce-a is made from the scientific formula of Dr. Hess (M. D., D.V.S.), it is not a stimulant, but a tonic that produces eggs in nature's way; gives an appetite, and that in turn produces flesh. It prevents and cures all poultry diseases. Costs but a penny a day for 30 fowls.

DR. HESS Poultry Pan-a-ce-a

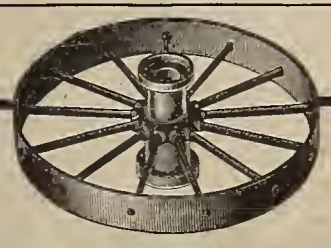
is sold in 1½-lb. package, 25c; 5-lb. 60c; 12-lb $1.25; 25-lb pail, $2.50; (except in Canada and on Pacific Slope).

Keep your poultry free from lice with **Instant Louse Killer.** Cost, 1-lb 25c; 3-lbs 60c.

If your dealer can't supply you write us.

Address, DR. HESS & CLARK, Ashland, Ohio.

Manufacturers of Dr. Hess Stock Food.



Your Old Wagon

is no stronger than it's weakest wheel. Give it new life and usefulness by giving it new

STEEL WHEELS

We furnish all sizes—from 20 inches up. Any width of tire from 2 to 8 inches. Cheaper than repairing old wheels—better than the old ones ever were. Low wheels save labor. Wide tires save horse flesh. Catalogue free.

EMPIRE MFG. CO., Box 109F Quincy, Ill.

$100 BUGGY FOR $50

Built to order, just as you want it without extra charge.

Sold on 30 Days' Free Trial Guaranteed 2 Years

Our No. 77 COLUMBIA

The King of the Buggy World. It is all that a good buggy ought to be

Write for our 1904 Money Saving Free Catalog, illustrating and describing this buggy and over 200 other up-to-date styles of

VEHICLES and HARNESS

Don't buy until you have examined it. Address Dept. No. 14,

Columbia Mfg. & Supply Co., Cumminsville, CINCINNATI, O.

CREAM EXTRACTOR FREE

This is a genuine offer made to introduce the People's Cream Extractor in every neighborhood. It is the best and simplest in the world. We ask that you show it to your neighbors who have cows. Send your name and the name of the nearest freight office.

Address PEOPLE'S SUPPLY CO. Dept. 131, KANSAS CITY, MO.

FOR CATTLE & HOGS — FREE TO DIPPING STATIONS, NUSERY MEN, SHEEP & STOCK RAISERS, SCHOOLS, FARMERS, WIVES, ETC. — FOR PLANTS TREES ETC.

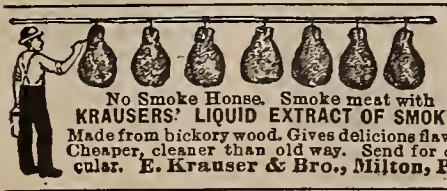
PREVENTS HOG CHOLERA — ENOUGH TO MAKE 1 GALLON

Dipolene!

WRITE FOR PRICE AND ITS USES

MARSHALL OIL COMPANY, MARSHALLTOWN, IA. Box 23

FOR SHEEP & LAMBS — FOR A HOME DISINFECTION



No Smoke House. Smoke meat with KRAUSERS' LIQUID EXTRACT OF SMOKE. Made from hickory wood. Gives delicious flavor. Cheaper, cleaner than old way. Send for circular. E. Krauser & Bro., Milton, Pa.

HEALTHY TREES Honest in quality. We Pay Freight.

Grafted Apples, 100 $5.50; budded peaches, 100 $5.00; budded cherry, 100 $20. Good varieties. Concord grapes, 100 $3; Mulberry, 1000-$1.50; B. & H. Locust etc. low prices. Big Premiums Given. Catalogue mailed free for the asking.

CALBRAITH NURSERIES, Box 45, FAIRBURY, NEB.

Ohio Dairymen Meet

[CONTINUED FROM PAGE 7]

three thousand and fifty pounds of milk, or one hundred and fifty-six pounds of butter, a cow for six months."

United States Dairy Inspector Wells exhibited samples of renovated butter bought in Columbus for twenty and twenty-five cents a pound. It was sold under various fancy names. "So long as dairy men and women make butter termed 'packing stuff,'" said he, "renovated butter will exist. This 'packing stuff' wholesales at ten cents a pound. It is heated in large vats, aërated, and the odor removed, but the putrefaction remains. To avoid prosecution it is shipped in bulk into Ohio, cut into blocks with a wire-cutting machine, and sold as pure creamery or country butter, to suit the prejudices of the customer. There are thirty-two factories in the United States, with an annual output of 54,646,800 pounds. Ohio has eleven factories, three of which are now idle, producing 9,250,000 pounds per annum. The butter-fat that is made into renovated butter, and which wholesales at ten cents a pound, would, if sold to the creamery at present prices, bring the producer twenty cents a pound without the labor of butter-making. The small dairy is to blame for 'packing stuff.'"

"According to this statement," said Professor Decher, "the farmers of Ohio are losing one million dollars annually from this source alone. We must carry dairy education to them."

"It is the two and four cow dairy that is to blame for 'packing stuff,'" commented Professor Smith.

Much interest was aroused by Professor Vivian's paper on "Scale Pepsin in Cheese-making." There was no appreciable difference between pepsin and rennet cheeses, either in the curd-vats or curing-rooms. Pepsin cheese sold to the same discriminating trade that had used rennet cheese aroused no comment. A pepsin cheese made by Mr. Herrick took first prize at Ohio State Fair last year, scoring ninety-eight per cent. This cheese had been kept in cold storage most of its life. Commercial pepsin is an available source of coagulating material for cheese-making. The cost of pepsin and rennet are about the same, but ultimately pepsin ought to be the cheapest, as the supply is limitless. Pepsin cheese seems to have better keeping qualities than rennet. Points in favor of pepsin are that rennet is variable, while pepsin is fairly constant in strength; rennet deteriorates rapidly, while pepsin, being in a dry form, can be kept indefinitely; rennet extract often contains large numbers of bacteria, while pepsin can be kept approximately sterile. Scale pepsin is manufactured from the stomachs of pigs, while rennet is obtained from the stomachs of very young calves. Both rennet and pepsin firms were represented by skilled and courteous chemists, who added greatly to the interest in the exhibit-room.

Professor Smith of the Michigan Experiment Station described the typical dairy-cow. He maintained that skilful feeding could increase the flow of milk, but not the quality. This opinion was sustained by the practical and scientific dairymen who were present.

Mr. Sudendorf, in charge of the Dairy Exhibit at St. Louis, briefly described plans for show, and urged Ohio to make a creditable exhibit. He urged more dairy education, even to holding local institutes in non-dairy regions, as it is from these places that poor butter comes.

Resolutions were passed favoring appropriations for Ohio State University dairy department—two thousand dollars for holding dairy institutes throughout the state, ten thousand dollars for the Dairy Exhibit at St. Louis, to be under the jurisdiction of the state board of agriculture, an increase of five thousand dollars appropriation from the general government for each experiment station; Senate Bill No. 18, to regulate the manufacture and sale of commercial feed stuffs; better marking of renovated butter; the establishment of a standard for full cream cheese, to contain thirty per cent fat and fifty per cent total solids; a specific standard for whole milk of twelve per cent total solids, one fourth of which shall be fat, and for skim-milk eight and five tenths per cent solids not fat, and a minimum of fat content in cream of eighteen per cent.

Professor McKay, recognized as an expert over the United States, for the third successive year judged and scored dairy products. He said the quality had improved fully thirty per cent over the past. He urged long churning, as it increases the butter's capacity for taking up water. Butter should not be drained too dry, and salt should be added at once. The lowest butter score was eighty-nine per cent, and the highest ninety-seven and one half per cent. W. C. Barrett won sweepstakes in butter-making.

MARY E. LEE.

BURPEE'S Farm Annual

"THE LEADING AMERICAN SEED CATALOGUE," is now more "a leader" than ever before. Thoroughly revised and greatly improved, it tells not only THE PLAIN TRUTH about seeds, but has also **many new features for 1904.**

An elegant book of 178 pages, it contains hundreds of illustrations from nature and **six superb lithographic colored plates.** It shows in natural colors thirteen "true and tried" new Vegetables of sterling merit, three new Nasturtiums (of a distinct type), and seven Superb Sweet Peas,—all painted from nature, by New York's leading artist, at our famous FORDHOOK FARMS.

It presents also *twenty-one faithful photogravures* of America's Largest Mail-order Seed Trade,—views in both town and country. Altogether it is pronounced the

Best Seed Catalogue Ever Published

And it's Free! provided you will *ask for it now.* **It will cost YOU one cent** to mail your address on a postal card to us. It will cost us four cents postage—plus eight cents for the catalogue,—just **twelve cents** to respond to your request.

We are willing to bear this risk—**twelve for one!** If you will only read

BURPEE'S FARM ANNUAL for 1904

we feel quite sure that you will favor us with **at least a trial order,** and this is all we ask, as BURPEE'S SEEDS will tell their own story in your garden and fields.

Better send for this catalogue **to-day!** One cent spent by you insures twelve cents spent by us, and this should be sufficient to convince you that we have *faith* in BURPEE'S SEEDS and also in our ability to persuade you **to try Burpee's Seeds,** if you will only read BURPEE'S FARM ANNUAL.

Are you willing to spend that cent?

Shall we hear from you? If not, You will miss an opportunity to become acquainted with **the very BEST SEEDS that can be grown!**

REGISTERED WB TRADE MARK

W. ATLEE BURPEE & CO., Philadelphia, Pa.

Factory Prices, 30 Days' Trial

"Eli" Road Wagon.

$16.40

Imitation leather trimmed: Carpet, wrench and shafts—just as illustrated. Our Vehicle Catalogue 250 gives complete particulars. Send for it before you order. Other Road Wagons $21.50 and $23.90.

"Defiance" Buggy.

$23.00

Cloth trimmed: 3-bow top, back and side curtains: carpet and shafts just as shown in cut. Before you order write for Catalogue 250 with complete details. We have Buggies in better grades at $30.00, $35.95, $39.50, $43.50, $45.00 and up to $85.00.

"Climax" Surrey.

$39.50

With canopy top: imitation leather trimmed: good, strong springs, carpet and shafts. Before ordering send for our Vehicle Catalogue, which explains fully. We have better Surreys at $46.50, $59.95, $72.50, $87.50, $110.00, $125.00, etc.

Do not place your order for any kind of a vehicle until you have heard from us. Let us show you how to get a high grade, nobby and attractive rig at a price anywhere from $10 to $25 lower than you can get a good rig for elsewhere. We have just the kind of a vehicle you are looking for. Buggies, surreys and spring wagons in a thousand styles. Stanhopes, breaks and runabouts—even farm wagons—all at prices you can see at a glance are decidedly low.

No trouble for us to have low prices, because we build the rigs in our own factory and let you have them at the wholesale price. No dealers, no jobbers, no middlemen—just a direct transaction between the maker and user by which the profit of the middle fellow goes to you.

What's better, we give you quality; real second-growth hickory, put together with Norway iron, and finished off like a Pullman car. No "dipping" in our factory, no new-fangled painting process, but just the old-fashioned finish with pure lead and pure oil rubbed down by hand.

Everybody likes our rigs. They are popular for their fine lines and superior finish—points that make a "Ward" buggy look like a thoroughbred when compared with the common kind.

Our free Vehicle Catalogue No. 250 explains all. It gives the details of our 30 days free trial offer; it explains our Guaranty of Satisfaction, and our SHIP ON APPROVAL plan. It also tells how we can make shipments from factories in Chicago, St. Louis and Cincinnati. We are saving our customers $5 to $10 on each buggy, and giving more style, durability and finish than can be obtained anywhere else. Write to-day—a postal will do. Ask for Vehicle Catalogue No. 250. The Spring edition is now ready. Address

Shipments Chicago, Cincinnati or St. Louis.

Montgomery Ward & Co.
32 years World's Headquarters for Everything. 66 Michigan Ave., Madison & Washington Sts., Chicago.

Made for the Man Who Wants the Best.

The Great Western Endless Apron Manure Spreader

spreads all kinds of manure, fresh, well rotted, fine, coarse, hard, mixed, full of straw, full of corn stalks, etc.

Will also spread compost, lime, land plaster, salt, wood ashes, cotton seed and hulls, and in every case do it quicker, better and more evenly than it can be done by hand. Spreads as much manure in one day as twelve men can load and spread by hand and the job is much better when done. Spreads the largest load a team can haul in 2 to 4 minutes. It makes the same amount of manure go three times as far and at the same time produce better results.

REGULATED to spread much or little while in motion. Puts it on thick on poor spots—8 to 25 loads per acre. **ENDLESS APRON**—always ready to load. No turning back into position with crank. **COMBINED HOOD AND END GATE** keeps manure away from beater while loading and acts as hood in spreading. Catches all flying sticks, stones, etc. Front wheels cut under, and machine can be turned in its own length. Made in two styles and four sizes. Capacity 30 to 70 bushels. It saves **time, labor and money** and will double the crops. Makes all manure so fine and spreads it so evenly that it is immediately available for plant food. **LARGE CATALOGUE** 10 by 13 inches, with 8 large cuts shows the spreader perfectly and describes it fully. Tells also how to apply manure to secure best results. **Mailed free.**

SMITH MANURE SPREADER CO., 16 & 18 S. CLINTON ST., CHICAGO, ILL.

200 Sold 1896

Towers' Surface Cultivator

J. D. Tower & Sons Co:—We use on our several seed farms more than fifty of your Surface Cultivators during the growing season and we consider them one of the best on the market. The Tower Cultivator has been very successful. We recommend them to the up-to-date farmer.

Sept. 5th, 1903. FUNK BROTHERS SEED CO.

Send for Treatise on Corn Culture, free.

THE J. D. TOWER & SONS CO., 10th St., MENDOTA, ILL.

1902 5,300 Sold

OUR CLAIMS BACKED BY OUR POTATOES

We are very careful of our reputation on seed potatoes. Nothing is sold that will not back up our guarantee to be just as represented. All of the standard sorts and a few new varieties that we have proved to be great yielders. Also Field and Garden Seeds—the best that grow. Good line of poultry supplies. Prices low as good seeds can be sold. Catalogue free.

L. L. OLDS SEED CO., Drawer D, Clinton, Wis.

GRAND HEDGE CALIFORNIA PRIVET. Green nearly all winter. No thorns. Grows quick. Catalogue free. Trees, plants, vines. ARTHUR J. COLLINS, Burlington Co., Moorestown, N. J. **WHAT!**

$60 PER MONTH straight salary and expenses for men with rigs to introduce our Poultry Remedies among the farmers. We mean this, and furnish Bank references of our reliability. Don't answer unless you mean business. Address EUREKA MFG. CO., Dept. 45, East St. Louis, Illinois.

THIS RING FREE.

Cut this advertisement out and mail it with name and address to Guard Manufacturing Co., 31 Pine St., Dept. A. H. C., New York.

For a little personal work we will send you one of these labor-saving, economical machines free.

1,000,000 NOW IN USE

Which is overwhelming evidence that your home should have a

BOSS WASHING MACHINE

Will positively cleanse clothes in half the time required by other washers. Strong and durable, and easy to operate. Guaranteed not to tear the clothes.

We have hundreds of letters like these:

"I am using the Boss washer and will say it is a dandy. We used five others before I bought yours, but did not like any of them. The 'Boss' washes clean and is so easy to run I have told the whole neighborhood about it."
MRS. JOHN MARSH, Walloomsac, N. Y.

"A friend told me about the Boss Washing Machine and I had to go ten miles to get one. It is truly the 'Boss.' I have tried a good many washers, but yours is the best of them all."
MRS. E. C. DART, Richmond Centre, O.

If your dealer doesn't sell them, send us his name, and write for particulars and our pretty 1904 souvenir. Address

BOSS WASHING MACHINE CO., Sta. H-4, Cincinnati, O.

43 FLOWERS 30c

Worth $1.25

SPECIAL OFFER to introduce our goods. Money back if not pleased.

20 Pkts. Seeds

1 Pkt. Diamond Flower.
" Semple Asters, 4 cols.
" California Sweet Peas.
1 Pkt. Washington Weeping Palm.
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Around the Fireside

The Mexican Cotton-Boll Weevil

FARMERS and fruit-growers have been fighting injurious insects ever since there were any farmers and fruit-growers.

It would seem as if, after these many years of experience, they would have learned remedies for every insect pest.

They have learned many, and the scientific men who are constantly working on this very important problem have found excellent economic means to destroy the great majority of the injurious insects. But every few years there appears some new insect pest which is so strong and so prolific, or which lives in such a peculiar way, that it is able to do enormous damage, to destroy millions of dollars' worth of crops, and sometimes to alarm more than a single country and affect the relations of a number of civilized nations.

A few years ago the San Jose scale, a minute creature which injures fruit-trees, spread all over the United States, and occasioned the passage of edicts and laws in many foreign countries by which American fruits and fruit-trees were practically barred from international commerce.

LATE FALL BOLL, SHOWING HOW BEETLES HIDE BETWEEN INVOLUCRE AND BOLL

And now another of these great insect scourges is affecting the cotton crop of Texas, and it threatens to spread all through the cotton states. It is partly due to the vast amount of damage done by this insect that the price of cotton last year went up to almost unprecedented figures, so that cotton-mills have been obliged to stop, thousands of operatives have been discharged, and the wages of thousands more have been reduced.

THE COST OF THE WEEVIL.—Eighty per cent of the cotton crop of the world is raised in America, and of the cotton raised in the United States Texas produces nearly a fourth. All the richest cotton counties of Texas have been invaded by the weevil, and the loss in cotton destroyed by its depredations in the past summer has surely been as great as fifteen million dollars.

Spurred on by the high price of cotton and by the prospective danger of a great lessening of the American crop, foreign nations are making every effort to raise their own cotton. The English colonies are particularly active, and the German colonies as well. Russia is also making every effort to push the growing of cotton within her territory. Other nations are doing the same. The trade balance of the entire world may soon be affected if efficient remedies for the pest are not discovered and used.

NEARLY FULL-GROWN LARVA IN BOLL.

The weevil itself is an insignificant creature, a little gray snout-beetle about one fourth of an inch long, but it breeds very rapidly, multiplies enormously in the course of a summer, and works during the critical period of its life absolutely protected from any application which could be made to the cotton-plant.

Stowed away in old corn-stalks, in clumps of grass, under the bark of trees and logs, and in all sorts of sheltered places, the weevil passes the winter. Promptly as the cotton-plant comes up in the spring and early summer the weevils come forth, fly to the plants, and as soon as the first "squares"—unblown buds—are formed they lay their eggs in them. The young grub hatches, and destroys the forming flower, causing the square to drop. The grub changes to a pupa within the bud, and the full-grown weevil emerges soon after.

MATURE BOLL CUT OPEN, SHOWING FULL-GROWN LARVA.

When such of the flowers as escape this first attack mature, and the cotton-boll forms, it also is pierced by the weevil's beak, an egg is laid, and another grub begins to feed on the interior of the boll, destroying all the forming cotton-lint, reaching full growth and changing to pupa and emerging as a weevil. In this way the insects increase in geometrical ratio, until by late summer they occur in countless millions; often hardly a boll matures.

AN INVADER FROM MEXICO.—A bale of cotton contains from four hundred and fifty to five hundred pounds, and in former days to raise a bale or a bale and a half of cotton to the acre in the best parts of Texas was almost a rule. Where the weevil has made its appearance, however, it is often difficult to raise a bale of cotton on ten, or even fifteen, acres of land.

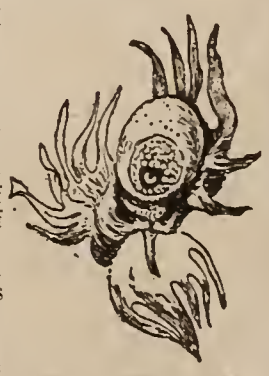
The weevil came to Texas from Mexico, where in certain places it had absolutely stopped the cultivation of cotton. It crossed the Rio Grande at Brownsville, and was carried north across a great extent of grazing-country in cotton which was taken to be ginned at a place called Alice. From Alice northward and eastward cotton culture is continuous, and the weevil spread at the rate of about seventy-five miles a year from 1894 until the present time. It has now reached practically to the northern border of Texas, and is on the east within a few miles of Louisiana.

During all this time the United States Department of Agriculture and the State Agricultural College of Texas have been studying the insect, and trying to find some means of fighting it successfully. Eight or nine years ago it could have been stopped and all this damage prevented by abandoning the culture of cotton in an unproductive section. Or if the planters could have been induced to cut down and burn the cotton stalks in the fall, it is probable that the insect would not have spread, and would eventually have been exterminated.

AN ADULT BEETLE.

All sorts of experiments have been made with different insecticide mixtures and with many different kinds of machines. The most careful studies have been made of the life-history and habits of the insect. Experts have been sent to Mexico, to other portions of Central America, and to the West Indies as well, to study the insect in its natural home—for it is evidently a tropical species—in the hope of being able to find some parasite or natural enemy which might be introduced with beneficial effect.

IS THERE A REMEDY?—Although no such parasite has been found, and although no poisonous application has been discovered which will destroy the weevil, and although no practical machine has been invented, we have nevertheless, through our intimate knowledge of the life-history of the weevil, found a way to grow cotton in paying quantities in spite of the destructive creature.



NEWLY HATCHED LARVA IN YOUNG SQUARE.

In the spring the weevils are few in number; the great majority of them have been killed by the long winter. Comparatively few come out of hibernating quarters in the spring to lay the eggs for the coming generation. A single female will have millions of descendants by autumn, but these millions are gradually developed.

It was the old custom to pick cotton in Texas until past Christmas, and in late autumn the weevils are at their height in point of numbers. If planters use northern cotton-seed—the plants from which develop much more rapidly than from Texas seed—if they plant their rows a little further apart than has been the custom, if they cultivate the crop and force it to early maturity, they will be able to raise a good quantity of cotton before the weevils have become so numerous as to destroy the great majority of the bolls.

[CONCLUDED ON PAGE 11]

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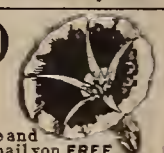

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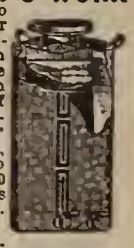

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The Mexican Cotton-Boll Weevil

[CONTINUED FROM PAGE 10]

In this way, on experimental plots aggregating seven or eight hundred acres, in different parts of Texas, the experts of the division of entomology of the United States Department of Agriculture have been able to raise and pick, before the middle of October, from two thirds of a bale to a bale an acre, whereas from crops not thus planted and treated only a bale to from eight to twelve acres has been secured.

Then, after this amount of cotton has been picked, the cotton-stalks are cut down or plowed up, left to lie for a while until dry, and are then burned.

Very many weevils are destroyed in this way. The few which escape have a much longer period to wait before the crop comes up, and many die. The number which will be on hand to attack the cotton on these fields next year will be very small. The result is that more cotton can be raised year after year.

Thus cotton can be raised in spite of the weevil. But the weevil will not be exterminated; it will probably continue to spread, and it is altogether likely that it will invade the other cotton-growing states.

The work on remedies, however, is still going on; the search for parasites in tropical countries still continues. Congress will probably appropriate at this session a large sum of money to help in the work, so that, although the outlook is rather bad, it is by no means hopeless, and the prospect that the United States will lose her supremacy in cotton production on account of the weevil is, in my mind, not greatly to be feared.—Youth's Companion.

Not Hiring Any Generals

Ever since the war some of the privates have told with great relish of the old farmer near Appomattox who decided to give employment, after the surrender, to any of Lee's veterans who might wish to work a few days for food and small wages. He divided the Confederate employees into squads according to the respective ranks held by them in the army. He was uneducated, but entirely loyal to the Southern cause.

A neighbor inquired of him as to the different squads. "Who are those men working there?" he asked.

"Them is privates, sir—privates of Lee's army."

"Well, how do they work?"

"Very fine, sir; first-rate workers."

"Who are those in the second group?"

"Them is lieutenants and captains, and they work fairly well, but not as good workers as the privates."

"I see you have a third squad. Who are they?"

"Them is colonels."

"Well, what about the colonels? How do they work?"

"Now, neighbor, you'll never hear me say one word ag'in any man who fit in the Southern army; but I ain't a-gwine to hire no generals."—Baltimore and Richmond Christian Advocate.

Foreign Notes

The latest novelty in petrol-engines in England is a motor in which one mechanically operated valve serves for both admission and exhaust functions. The working is effected by the aid of a sliding sleeve which surrounds the valve, and a peculiarly shaped cam, giving two various degrees of lift to the valve.

A trackless electrical train was tested in Paris. Upon the conclusion of the test the train stopped at the Elysée Palace, and the inventors received the felicitations of President Loubet. The train was composed of a motor-carriage, similar to an ordinary automobile, and five cars. The invention consists in the transmission of sufficient motive power from the carriage to move each car. It was found that all the cars tracked exactly with the motor.

A new polar explorer is reported as preparing to make an attempt next year to establish a new farthest-north record. He is Mr. Andrew J. Stone, an English naturalist, who has spent a large part of his time during the last ten years in Alaska and north British Columbia. Mr. Stone is convinced that the overland route to the pole is impracticable, and it is his intention to endeavor to get to the coveted point by a steamship through the Northwest Passage.

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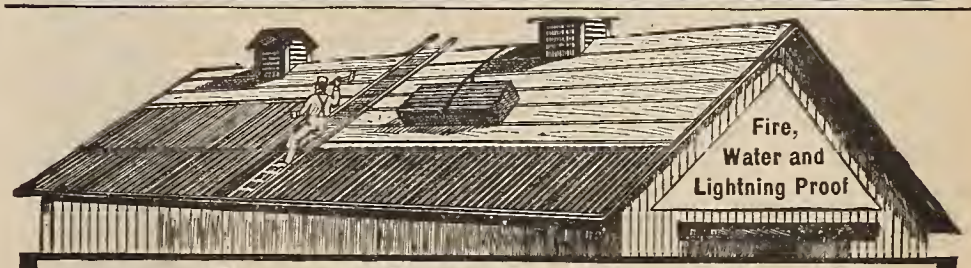

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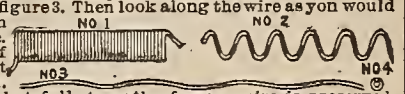

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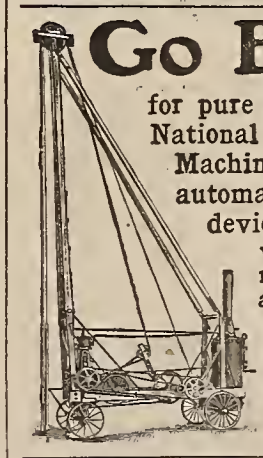

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The Housewife

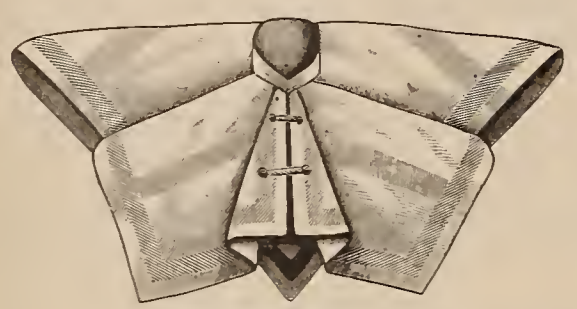
Handkerchief Articles

WE ARE presenting herewith several illustrations of fancy or useful articles designed from handkerchiefs. Fads as a usual thing are short-lived, but this "handkerchief" fad has outlived several seasons, and has now developed into something of a craze. The articles, however, being economical, practical, and withal very pretty, our housewives will no doubt enjoy making a few of them for home or wear.

In making our collection, there were too many for one page, so these illustrations and descriptions will be given in subsequent issues. The descriptions of the articles illustrated on this page follow:

PILLOW-TOP.—This is made of four men's-size fancy handkerchiefs—one forming the top, one the bottom, and two folded bias. The centers circled out form a ruffle, which is gathered and basted from corner to corner. Stitch all together.

KIMONO.—This garment is made of five men's-size fancy handkerchiefs overhanded together two and one half inches from the corners, which are turned down



KIMONO

and fastened with a small button, thus forming the neck. The middle handkerchief falls in a point down the back. Join the seams of the next handkerchief together about two inches, to form the sleeve. Lay a plait on each side of the two handkerchiefs forming the front, and hold in place with a small button. A button is placed at the neck, and fancy cord or ribbon looped over the buttons to keep the garment in place.

SOILED-HANDKERCHIEF BAG.—This bag is made of two men's-size fancy handkerchiefs. Cut each in four squares. Join the hems together in a solid square for the bottom; join as before, only stop four inches from the center, thus leaving an opening for the top. Join the squares together, and work brier-stitch in silk across each corner four inches from the point. Fold down the four hemstitched corners, and sew a half-inch brass ring at the seams. Use two and one half yards of ribbon for hangers and bows, and five plush balls for the corners and center.

DUSTING-CAP.—This jaunty little dusting-cap is made of one large-size fancy handkerchief folded in half and overhanded together. Lay a one-inch box-plait in the center of the seam, and three on each side. Turn the corner over the back, showing the seam; place three box-plaits four inches from the bottom; turn the corners back four inches, then down one and one half inches. Fasten the plaits down with fancy stitches.

APRON WITH BIB.—Take two men's-size fancy handkerchiefs to form the ruffle, bib and pockets. India linen is used for the apron proper. Fold one handkerchief in four, and cut out a twelve-inch circle from the center of the handkerchief. Open at one side, and turn off the corner to hem the edge. Fit this ruffle on plain, with finishing-braid, to three fourths of a yard of linen, trimming the corners of the linen as desired. Cut the other handkerchief in half, and use one half

SOILED-HANDKERCHIEF BAG

for the bib, laying a plait in the center. Cut the hemstitched corners off the other half, trim off the corners, and finish with braid for the pocket. Use linen for the band and ties. L. M. KING.

HANDKERCHIEF COLLAR.—Use a large hemstitched handkerchief to make the collar. Cut the ties so that a corner of the handkerchief will form an end of each tie. Use the remainder of the handkerchief to cover the foundation of the collar, laying it so that the remaining corners will form the turn-overs. The foundation should be in two pieces, herring-boned together. Hem the ties, sew them to the collar at the back, and tie in a four-in-hand in front. M. W.

HAIR-RECEIVER.—A dainty and useful little article is the hair-receiver made out of a handkerchief. Take a large handkerchief with a pretty colored border, and a small-size embroidery-hoop. Sew the handkerchief to the hoop close to the border except at the corners. The corners make the four tabs. Use three yards of ribbon the same color as the border for bows and a hanger. When completed it is very neat, inexpensive and easily laundered. O. M.

Simple Gifts for Easter

It is not so very old, this custom of remembering our friends at Easter with some bit of needlework, some simple novelty, but it is very pleasant for the giver as well as the recipient. It takes so little to bring a smile to some face, so why not make a dainty

DUSTING-CAP AND BIB-APRON

trifle occasionally to send with our Easter greetings? The expense need not be great, but the kindly thought which prompted the little gift will bring a glow of tender feeling to the heart of the one thus favored.

Sachets are among the most desirable gifts for a young lady. They are of all shapes and sizes, but a very dainty one is made in this manner: Take a white square envelope, and paint a spray of wild roses in water-colors thereon. If you are not artist enough to do this in the regulation way, trace a wild-rose spray onto the envelope with impression-paper, using a spray from some scrap of wall-paper or an embroidery-pattern. Now tint the design with colors from a child's paint-box, not trying to make the paints heavy. Cut a piece of sheet-wadding to fit the envelope, and place therein, first sprinkling liberally with sachet-powder. Tie a narrow pink ribbon about the envelope, leaving loops and ends on the front.

Another pretty gift is a veil-case. Make this from a piece of sheer lawn measuring nine by twelve inches. Outline the word "Veils" near the center of one half of this, and scatter a few daisies and some fallen petals about it. The word should be in yellow, the daisies white, with yellow hearts. Now line this with yellow silk or near-silk, placing a layer of yellow sheet-wadding between. Sprinkle with sachet-powder, fold across the center, tying at the ends with narrow yellow ribbons.

A hat-pin holder is of white linen, embroidered in blue forget-me-nots, stretched over a long, narrow box, such as that in which tubes of tooth-paste come. One end of the box is removed for the top, and a piece of cable net or other openwork material placed across it, through which to thrust the pins. A frill of narrow lace finishes both top and bottom. Hangers of blue baby-ribbon are attached to two sides of the top.

A memorandum-pad and a pencil secured by a narrow ribbon to a half-yard strip of inch-wide ribbon will prove a blessing to some busy woman. One end of the ribbon should be fastened to a strong safety-pin, with which to attach the "memory's aid" to the skirt-band just under the belt. If any decoration is desired, embroider the initials of the owner-to-be down the ribbon, one below the other, in cross-stitch.

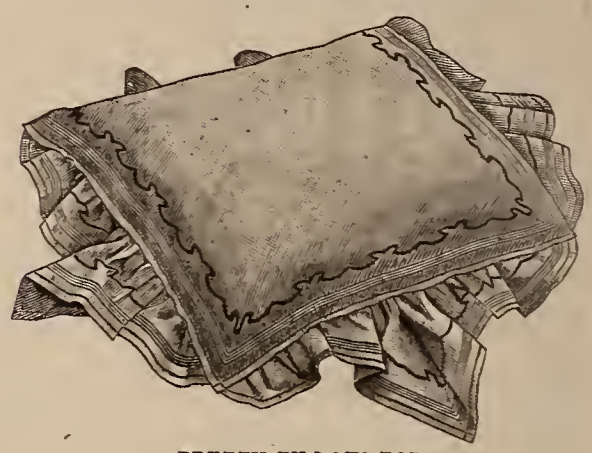
A neck or hair ribbon with small sprays embroidered on each end will prove acceptable to mother or daughter. A daintily hemstitched handkerchief is also a pleasing gift. Just now these are made of the sheerest possible lawn or linen, and are decorated with tiny hand-embroidered polka-dots or disks in a delicate color all the way around. Some have a few scattered flowers in one corner in lieu of the disks. These are embroidered in the natural shades of the flower, and are very handsome when neatly done. A very pretty one was a delicate lavender lawn with a few purple pansies in one corner.

A book-mark is always a suitable Easter gift. One made from three pieces of ribbon of varying lengths is very pretty. Embroider an initial on one end of each, and secure the other ends together, so that when the ribbons hang down the initials will be in their correct order. Finish the free ends with a fringe of knitting-silk or by raveling the ribbon itself. Make a small rosette of baby-ribbon to match the markers, and place over the stitches which fasten the ends together. This will remain at the top of the book, while the three ends may mark as many places.

MAE Y. MAHAFFY.

The Spring Shirt-Waist Suit

The 1904 spring shirt-waist suit is a more carefully studied costume, to all appearances, than its predecessors. It is, as a rule, rather more elaborate, despite the fact that the original intention of the suit was simplicity, and that its popularity was the result of an inward protest against the overtrimmed gown. A coarse linen suit in string-color is trimmed with bands of Russian cross-stitch, red being the dominant color.



PRETTY PILLOW-TOP

The shirt-waist shows the long shoulder-lines demanded by fashion, and these are emphasized by bands of the colored trimming. A band covers the buttons and buttonholes, and makes the small, tight cuff. The skirt is not trimmed with bands, but has the cross-stitched pattern done directly on the linen. One line is brought down the front, and two shorter lines from the hem to within eighteen inches of the belt are on either side.—New York Post.

Economical Recipes

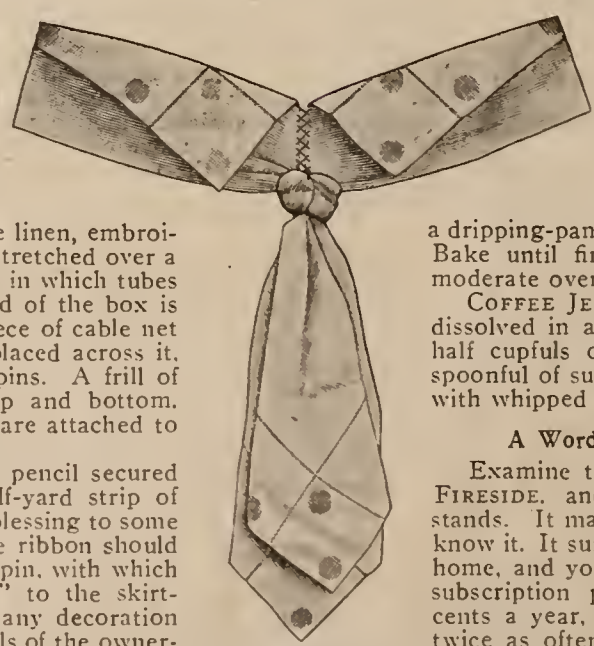
DEVIL'S FOOD.—Two cupfuls of dark brown sugar, one half cupful of butter, one half cupful of sour milk and two eggs. Beat thoroughly, then dissolve one teaspoonful of soda in one half cupful of boiling water. Add to the water and soda one third of a cake of sweet chocolate which has been grated, then put this in the cake, with two heaping cupfuls of flour and one teaspoonful of vanilla. Ice with white icing.

HAIR-RECEIVER

ANGEL'S FOOD.—One and one half tumblerfuls of granulated sugar sifted once, one tumblerful of flour with one teaspoonful of cream of tartar sifted four times, whites of eleven eggs beaten to a stiff froth, and one teaspoonful of vanilla. Beat the eggs with a wire spoon, add the sugar, then the flour and vanilla. Bake in an ungreased pan for forty minutes in an even oven. Do not remove from the pan until cold.

CUSTARD PUDDING.—One and one half pints of milk, four eggs, one cupful of sugar, two teaspoonfuls of extract of vanilla and a pinch of salt. Beat the eggs and sugar together, dilute with the milk and extract, pour into a buttered baking-dish, and set in the oven in a dripping-pan two thirds full of boiling water. Bake until firm—about forty minutes—in a moderate oven.

COFFEE JELLY.—One half box of gelatine dissolved in a little cold water, one and one half cupfuls of clear coffee and one tablespoonful of sugar. Pour into a mold. Serve with whipped cream. MARIE WILKINSON.



HANDKERCHIEF COLLAR

A Word with the Good Housewife

Examine the address label on FARM AND FIRESIDE, and see how your subscription stands. It may have expired and you did not know it. It surely is a valuable paper for your home, and you must not be without it. The subscription price is now only twenty-five cents a year, and it comes twice a month—twice as often as a monthly journal comes. The best, and the most interesting farm and family journal in the world. We leave the matter of determining the true worth of FARM AND FIRESIDE to you, because we know you will decide right. Will you speak to your neighbor about FARM AND FIRESIDE? If you would, he would subscribe, and he would like "Hank Peters'" stories, too.

The Housewife

Hints for Ironing-Day

"IRONING-DAY is the hardest day in the week," said my young neighbor, Mrs. S.

I had been thinking, as I sat watching her, that if I attempted to iron table-cloths, sheets, my big aprons, etc., on a board about a foot wide, and with a thin cover pinned on loosely, ironing-day would soon become to me what it was to her—the hardest day in the week, instead of which it is one of the pleasantest.

Much of the success of ironing depends upon the way in which the clothes are starched, dampened and rolled; indeed, I have read that clothes are half ironed when properly dampened and rolled. If you are not able to distribute the dampness evenly when sprinkling the water by hand, an old whisk-broom will be found a great convenience. It is about as unsatisfactory to iron clothes that are too damp as those that are too dry, and when you find a garment with here and there a spot as wet as it was when you put it on the line, and other spots that are "bone-dry," you are almost in despair. Be sure that the clothes are in good shape first, then dampened evenly, rolled tightly and slapped once or twice.

Then, too, so much depends upon what you iron on. If you possess one of the old-fashioned tables, about three by six feet, without any leaves, then you have an ideal ironing-table. Cover it first with a heavy blanket, then with a sheet, and make sure that the corners are securely fastened. With your sheets and table-cloths folded lengthwise and laid on this table, a few minutes will do the work that would take about three times as long if you had to iron about a foot at a time, and then pull another little stretch across the narrow ironing-board. If you have not one of these tables, the next best thing will be to clear as large a space as possible on the kitchen table, and cover it securely. This will necessitate only one or two changes while ironing the larger pieces.

For the smaller garments, the board with one end narrow enough for children's clothes is almost a necessity, and a well-covered board more than pays for the time and effort used in covering it. To make the covers, lay the board on the cloth (doubled), and cut around it, allowing for seams on all sides. Sew all around except across the larger end; turn the bag, slip in the board, and finish the open end. Make another bag in the same way, and slip it on. Two under covers of Canton flannel and an outer one of muslin make about the right thickness, though any desired thickness may be obtained. When the outer cover becomes soiled, you have only a long, narrow bag to wash, then slip on again.

A smaller board for ironing the sleeves of shirt-waists and children's dresses is a great convenience. For fifty cents you can buy one with patent arrangements for fastening to the table, and which can be turned back when not in use; or any one who is handy with tools can make two boards—one small enough for children's sleeves, and the other for shirt-waist sleeves—and join them near the center by an upright a few inches long. In this way one board rests on the table, while the other is a few inches above, and space is allowed for the garment to be passed between the boards without wrinkling it.

Wax, a flat-iron stand, and a paper or cloth on which to rub the irons, are also necessities. The practice of dropping the hot iron on any part of the iron-cloth always seems very slovenly. It goes without saying that you must have and keep a good, lively fire, or all these preparations cannot make the day an easy or pleasant one.

The chief objection that every woman who irons has to the work is that she must stand on her feet for so long a time. Many women overcome that objection by sitting on a high chair or stool while at work. Perhaps some may think this a lazy way of working; but saving your strength for use in some other direction is never laziness.

MRS. W. G. H.

Square for Knitted Quilt

A large square consists of four small squares joined together. There are three hundred and sixty small squares, or ninety large squares, in a good-sized spread.

Cast on 3 stitches, using cotton No. 12 and two needles of a suitable size for cotton.

First row—Knit plain.

Second row—Slip 1, make 1 by knitting the horizontal thread which lies under the loop (all of the widening at the beginning and ending of each alternate row is made in this manner), knit 1, make 1, knit 1.

Third row—Slip 1, and knit plain to the end of row.

Fourth row—Slip 1, make 1, knit 1, throw thread over, knit 1, throw thread over (this begins the raised pattern), knit 1, make 1, knit 1.

Fifth row—Slip 1, knit 2, purl 3, knit 3.

Sixth row—Slip 1, make 1, knit 2, throw thread over, knit 3, throw thread over, knit 2, make 1, knit 1.

Seventh row—Slip 1, knit 3, purl 5, knit 4.

Eighth row—Slip 1, make 1, knit 3, throw thread over, knit 5, throw thread over, knit 3, make 1, knit 1.

Ninth row—Slip 1, knit 4, purl 7, knit 5.

Tenth row—Slip 1, make 1, knit 15, make 1, knit 1.

Eleventh row—Slip 1, knit 5, purl 7, knit 6.

Twelfth row—Slip 1, make 1, knit 5, knit 2 together at the back, knit 3, knit 2 together, knit 5, make 1, knit 1.

Thirteenth row—Slip 1, knit 6, purl 5, knit 7.

Fourteenth row—Slip 1, make 1, knit 6, knit 2 together at the back, knit 1, knit 2 together, knit 6, make 1, knit 1.

Fifteenth row—Slip 1, knit 7, purl 3, knit 8.

Sixteenth row—Slip 1, make 1, knit 7, knit 3 together, knit 7, make 1, knit 1.

Seventeenth row—Slip 1, knit to end of row.

Eighteenth row—Slip 1, make 1, knit 3, throw thread over, knit 1, throw thread over, knit 9, throw thread over, knit 1, throw thread over, knit 3, make 1, knit 1.

Nineteenth row—Slip 1, knit 4, purl 3, knit 9, purl 3, knit 5.

Twentieth row—Slip 1, make 1, knit 4, throw thread over, knit 3, throw thread over, knit 9, throw thread over, knit 3, throw thread over, knit 4, make 1, knit 1.

Twenty-first row—Slip 1, knit 5, purl 5, knit 9, purl 5, knit 6.

Twenty-second row—Slip 1, make 1, knit 5, throw thread over, knit 5, throw thread over, knit 9, throw thread over, knit 5, throw thread over, knit 5, make 1, knit 1.

Twenty-third row—Slip 1, knit 6, purl 7, knit 9, purl 7, knit 7.

Twenty-fourth row—Slip 1, make 1, knit 35, make 1, knit 1.

Twenty-fifth row—Slip 1, knit 7, purl 7, knit 9, purl 7, knit 7.

Twenty-sixth row—Slip 1, make 1, knit 7, knit 2 together at back, knit 3, knit 2 together, knit 9, knit 2 together at the back, knit 3, knit 2 together, knit 7, make 1, knit 1.

Twenty-seventh row—Slip 1, knit 8, purl 5, knit 9, purl 5, knit 9.

Twenty-eighth row—Slip 1, make 1, knit 8, knit 2 together, knit 1, knit 2 together, knit 9, knit 2 together, knit 1, knit 2 together, knit 8, make 1, knit 1.

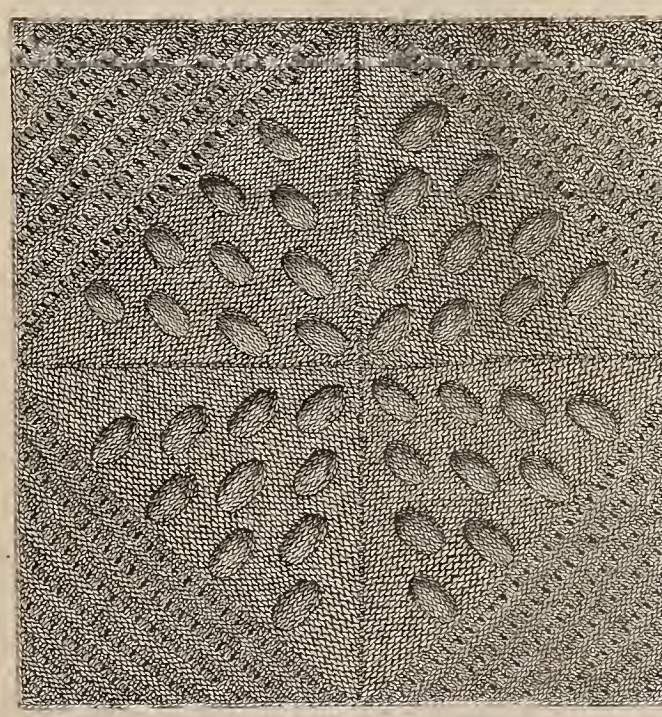
Twenty-ninth row—Slip 1, knit 9, purl 3, knit 9, purl 3, knit 10.

Thirtieth row—Slip 1, make 1, knit 9, knit 3 together, knit 9, knit 3 together, knit 9, make 1, knit 1.

Thirty-first row—Slip 1, make 1, knit 5, throw thread over, knit 1, throw thread over, knit 9, throw thread over, knit 1, throw thread over, knit 9, throw thread over, knit 1, throw thread over, knit 5, make 1, knit 1.

Thirty-second row—Slip 1, knit 6, purl 3, knit 9, purl 3, knit 9, purl 3, knit 7.

Thirty-third row—Slip 1, make 1, knit 6, throw thread over, knit 3, throw thread over, knit 9, throw thread over, knit 3, throw thread over, knit 9, throw thread over, knit 3, throw thread over, knit 6, make 1, knit 1.



SQUARE FOR KNITTED QUILT

Thirty-fourth row—Slip 1, knit 7, purl 5, knit 9, purl 5, knit 9, purl 5, knit 8.

Thirty-fifth row—Slip 1, make 1, knit 7, throw thread over, knit 5, throw thread over, knit 9, throw thread over, knit 5, throw thread over, knit 9, throw thread over, knit 5, throw thread over, knit 7, make 1, knit 1.

Thirty-sixth row—Slip 1, knit 8, purl 7, knit 9, purl 7, knit 9, purl 7, knit 9.

Thirty-seventh row—Slip 1, make 1, knit 55, make 1, knit 1.

Thirty-eighth row—Slip 1, knit 9, then knit like eleventh row, knitting 9 between the puffs and 10 at end.

Thirty-ninth row—Slip 1, make 1, knit 9, then knit like twelfth row, and so on for the other half of the puff. Work the fourth row of puffs to correspond.

Now begin the other half of the square, having finished the puffs, by slipping the first stitch and narrowing once at the beginning of each row.

First row—Knit.

Second row—Purl.

Third row—Knit.

Now make the holes as follows:

Fourth row—Slip 1, purl 2 together, * throw thread over, purl 2 together, and repeat from *, purling 3 together at the end.

Fifth row—Purl.

Sixth row—Knit.

Seventh row—Purl.

Eighth row—Knit.

Ninth row—Purl.

Tenth row—Purl.

Repeat from the first row.

N. B.—In knitting the last stitch of the last row, pass the needle from front to back instead of the usual way.

HEISTER ELLIOTT.

The New Recipes

For those who have felt the need of some little article which will hold the new recipes that promise so well, yet must be laid aside until a convenient time comes for trying them, there is provided a holder shaped like a miniature portfolio. The outer case is made of water-color paper, cut as indicated in the accompanying diagram, gummed on the flaps, and folded in shape. The inner case is simply a square of water-color paper folded in the middle. Clippings laid within this folded paper, which is then slipped inside the case, are more readily accessible than when laid on a shelf or in a drawer or within the leaves of a cook book, and they never slip out of their own accord, and disappear, with apparent malice, as clippings have a habit of doing. By way of showing the use for which it is intended, suitable cooking-utensils are marked in ink and tinted in color on the case, and its top is cut on their outlines. The inner paper is finished to correspond, and as it is a trifle longer than the outer case, a prominent utensil serves as a handle to withdraw it when necessary. The illustration shows the finished case, also the separate parts.—Agnes Warren, in The Modern Priscilla.

CASE FOR RECIPES

Two Delicious Desserts

TAPIOCA CUSTARD.—Two tablespoonfuls of fine tapioca and one pint of milk. Cook in a double boiler, stirring constantly until the tapioca is transparent. Add the yolks of two eggs beaten with three tablespoonfuls of sugar, a little flavoring and a pinch of salt. Stir until thickened. Pour into a dish, and when cool cover with the whites of the eggs, which have been well beaten. If pearl or lump tapioca is used, it must be soaked in cold water for several hours before cooking.

APPLE SNOW.—Core, quarter and steam three or four sour apples, then rub through a sieve, and cool. Whip the whites of three eggs to a stiff froth with one half cupful of powdered sugar and extract of vanilla. Gradually add the apple, and whip until white and stiff. Pile in a dish, and garnish with pieces of currant jelly.

MARIE WILKINSON.

Good to Know

To insure straight edges on linens and damasks, draw a thread before cutting. Table-cloths cut in this way will fold perfectly even and straight after being washed.

Leather chair-seats may be brightened and revived by rubbing them with the white of an egg. Leather book-bindings may be improved by the same method.

If fruit is stewed in a jar in the oven for three or four hours, instead of in a saucepan for a shorter time, it will have a much more delicious flavor.

When the carpet needs a patch, cut the patch the required size, smear on the wrong side with a paste made of flour and water, have your irons hot, smooth on the patch, then iron until the paste is dry.

Before laying a carpet, rub the boards over with turpentine, to safeguard it against moths.

Leave a few of the husks on the sweet corn for boiling, and take it to the table with them on. It will keep warm longer and taste sweeter.

Do not expose leather to the extreme heat of the fire, as this deprives it of its vitality.

MRS. J. R. MACKINTOSH.

Beauty Hints

Our grandmothers used to date the period of their lost girlhood by the first wrinkle, but the woman has to be seen nowadays who would have the courage to say that with her first wrinkle comes old age. She would tell you she is proud of that little faint line. But as a rule ill health is answerable for those disagreeable little lines, and indeed, when they are many in number, they are disfiguring.

Many are the methods that have been tried to make the skin smooth and fair again. A number of these methods are good, but as no two skins are alike, each requires a different treatment.

There is a good deal in the way you wash your face. Instead of washing it downward, as ninety-nine out of every hundred do, it should be washed upward, and gentle friction given to the parts most likely to wrinkle.—American Cultivator.

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Selections

Exploring the Niger

In connection with French military manœuvers in the Soudan the question was raised not long ago of the practicability of revictualing an army in the region south of the Sahara by means of the Niger. Theorists disagreed. Lieutenant Hourst, who had come down the river, said it could not be done. Captain Toutée, who had gone up, said it could. There was but one way to settle the dispute. Captain Lenfant was ordered to take ten thousand boxes of provisions and two thousand of equipment, proceed to the mouth of the Niger, load the material in "bateaux," deliver seventy tons of supplies on the bank at Niamé, whence it would be borne overland to Colonel Peroz at Lake Tchad, and with the remainder to revictual all posts along the river from Say to Asongo, the latter about two thousand miles up and above the last important rapid.

For this tremendous task Captain Lenfant was assigned two lieutenants and three non-commissioned officers and about forty negroes, but was able to hire natives at necessary points en route. He was required to fortify a base of operations at Arenberg.

What the intrepid soldier undertook when, with twenty "bateaux," he began the ascent of the river, can best be understood when one realizes that the Niger for a thousand miles falls over rapid after rapid. Its waters are torn to seas of foam by innumerable rocks, and the channel is often lost among dividing islands. Many of these rapids are in deep gorges, and in some of them the river falls one hundred times as rapidly as the Mississippi in its usual flow.

Starting upstream at low water, when the rapids are at their worst, Captain Lenfant urged his boats forward with oars and sails and setting-poles. Guided by negroes who proved themselves trustworthy, competent, and at times even heroic, and aided by numbers of friendly blacks pulling on long tow-lines, he conquered the obstacles without an accident. All the way up he sounded, charted and photographed the dangerous places, and made a report which would enable an army to follow where he had gone.

At Arenberg he divided his stores, and having assigned his white aids their tasks, went on against the rising flood to Niamé, put the seventy tons ashore, and then, with his chart to guide him, shot the rapids downstream to his base. At the falls of Patassi, where his colored guide, Lanciné, took the boats through in turn, they were carried seventy-three hundred feet in three minutes and twenty seconds, and accomplished in a few hours what had taken a month in ascending.

On the second trip Captain Lenfant was seriously ill; but although there was a hospital only a few hours downstream, and the nearest upstream doctor was sixty days ahead, he fought off the fever and accomplished his mission.

On his route and in a canoe trip on the upper river he collected a mass of valuable information, charting the floods and examining soils and crops. He visited cities that were populous three centuries ago, and are just recovering from the prostration which followed when the slave-trade swept away their people. He found them—Say, Gao-Gao, and many others—eager for commerce with the outside world.—Youth's Companion.

The Dunce of His Class

Many a boy has been a dullard at school and has made a failure of his after-life simply because there was some defect in his ears which made it impossible for him to hear distinctly or some defect in his eyes which made it impossible for him to see things as they are. The brain gets not only the most of its information through the ears and the eyes, but also the most of its skill in the all-important faculty of judgment. And if the ears do not hear well and the eyes do not see correctly, both information and training are defective and awry.

Every pair of young eyes and young ears should be suspected until they have been competently examined.—Saturday Evening Post.

Farm and Fireside is not all we hope and plan to make it, but see what it gives at this time—good, sound, practical farm talks from reliable authorities whose opinions are respected throughout the United States; the departments of interesting fiction, household matters for the good housewife, for the boys and girls. And if you have read the Important Announcement on the first page of this issue, you will see that all this, and even more than is indicated, can be obtained for only twenty-five cents for the entire year, twenty-four issues, or just about one cent a copy.

NORTHRUP KING & CO'S HOG-PASTURE MIXTURE

P. Frandson, Crystal Lake, Ia., says: "I had 30 hogs on one acre all season. Couldn't begin to keep it down." Our Catalog tells.

TO HAVE YOU TRY THEM we will, for 14c (silver or stamps) send pictured catalogue and 9 packages of our STERLING Seeds. 14¢

Field: GIANT 50-TON CARROT, largest field carrot; enormous yielder; high golden color (for butter); easily harvested. MOLD'S BLACK BEAUTY OAT, wonderful new variety from England: superior to white oats; yields enormously; very stiff, strong straw. SPELTZ, yields double quantity of oats, wheat or barley, makes better feed; straw fine for fattening; ripens early; resists drouth and frost; thrives on any soil. CALIFORNIA WONDER BEAN, heaviest yielding bean ever known; one bean produced 156 pods, 1168 beans by actual count.

Garden: NEW TRIUMPH RADISH, matures in 20 days, globe shape, striped horizontally with bright scarlet on pure white; a unique and striking novelty. N K & CO STERLING LETTUCE; beautiful crisp heading variety; rich golden center; never coarse; finest lettuce grown. N K & CO MINNESOTA RED GLOBE ONION, earliest, most perfect shape; finest color, no scullions; longest keeper; heaviest yielder.

Flower: N K & CO GIANT FANCY PANSY flowers extraordinarily large, exquisite colorings; a distinct and remarkable strain, greatly admired. GOLDEN GLEAM SWEET PEAS, deep primrose yellow; large flowers, long stems, rare novelty.

CASH PRIZES for largest yields of Peep o' Day Sweet Corn. Earliest. Sweetest.

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are "bred for bearing." That's why we cut all buds from the best fruited, bearing trees. It also insures stock true to name and variety. Over three million trees—913 acres. All new and standard varieties of Apple, Peach, Pear, Plum, Quince, etc. Also ornamental trees and shrubs. We sell direct at wholesale prices. Illustrated catalogue free.
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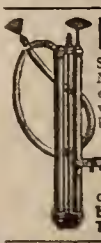

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Simplest and most substantial Pump in the world. Made with seamless brass tubing without threads on either end. Easily taken apart to clean. Does the work required quickly and effectively—a pump that is cheaper in the "long run." Users of Spraying Pumps would have none other after trying Barnes Perfection Pump. Send for free circular of receipts and other valuable information. Send $2.50 for sample and agency. We manufacture Iron Pumps of every kind for farm use. We also make a brass-bucket Spraying Pump with malleable-iron foot-rest.
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Compressed-Air Sprayers
Two and four gallon sizes. Made of heavy galvanized iron; also brass. For gardens, orchards, lawns, shrubbery, chicken-houses, etc. No continuous pumping. Compressed-air device sprays continually. Send $1.50 for sample. *Big money for Agents. Address*
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Worth twice the money. Ten pkt. and Catalog of Seeds and Bee Supplies of all kinds for 15c. Early Wakefield Cabbage, 40 Day Beet, Early Frame Cucumber, Imp. Hanson Lettuce, Snowball Radish, Favorite Tomato, Purple Top Turnip, Sweet Peas, Nasturtium, Pansy. Large Red Wethersfield Onion lb. 60c. Quality high. Prices low. Will save you money.
MARTS SEED CO., Seed Growers. Grundy Center, Iowa.

Sunday Reading

Some Reason to Smile

BY LIDA KECK-WIGGINS

There's gloom in your heart, dear,
I know it, to-night!
And burdens are yours, dear,
Far more than is right;
But somehow I'm certain
That just o'er the stile
There's joy, dear, and plenty,
Ah, yes—and a smile!

The world treats you badly,
And sorrows come fast,
But even the worst, dear,
Cannot always last;
There'll be the bright sunshine,
Dear, after a while—
Come, rout Trouble roundly
By one little smile!

Cheer up, dear, I beg you;
The old world is fair,
There still are the roses
And good things to spare;
Think not, tho' the trials
Are sore for a while,
That God will not give you
Some reason to smile!

"A Whole Christian"

A MISSIONARY in China writes that a girl in the mission-school under her care came to her, and said, "I want you to pray that I may be a whole Christian." Struck by the expression, the teacher inquired what she meant. So the girl told her of certain things she had done that day that she felt to be wrong. She had slighted certain duties in her daily task, she had gotten angry with one of her playmates, she had failed to do certain things her teacher had commanded her—all this she had instinctively felt was not in keeping with the spirit of the gospel. So she came with tears in her eyes at the close of day, saying, "Oh, teacher, I want you to pray for me that I may be a whole Christian!" Are there not many in the church on this side of the ocean that have need to pray that prayer, "Make me a whole Christian?"—Preachers' Helper.

The Morning Meal

George Mueller, the patriarch of Bristol, began every day of his consecrated life with devout meditation upon the Word of God. Speaking of this habit, he says:

"It often astonishes me now that I did not sooner see this point; and yet now, since God has taught me, it is as plain to me as anything that the first thing the child of God has to do, morning by morning, is to obtain food for his inner man. As the outward man cannot work for any length of time except it take food, and as this is one of the first things we do in the morning, so it should be with the inner man. Not prayer, but the Word of God; and here again, not the simple reading of the Word, so that it only passes through our minds just as water runs through a pipe, but considering what we read, pondering over it, and applying it to our hearts."—The Evangelist.

Aunt Sally on the Heavenly Breezes

One night we were out enjoying the moonlight and the warm, quiet breezes, such as one gets only in the South, when Sally came around and broke the stillness—no, added to the stillness—by saying, "I reckon dis am laik de breezes what comes from heaben to poo', tiahed, 'scouraged bodies what habs to step 'long on dis yer ole earth fo' a time."

I asked if she really believed that God cared enough for us to send something right from heaven to rest our tired souls and cool our heated brows.

"Chile, I b'liebes ebery'ting what de Lawd done say 'bout hisse'f, an' he done say he cares fo' us. I don't know 'bout de tiahed souls; I reckon dey am nevah tiahed, but I 'spects de strivin's ob de soul to be free do sometimes tiah dese bodies ob ours, an' do sometimes kase dese brows to become heated. Den I reckon if we's still long nuf so de Lawd kin reach us, he will send de breezes right smart from heaben, right plum' from de frone, to rest an' cool us off. Honey, has you done noticed dat when you's all tiahed an' 'scouraged, dat 'bout dat time de Lawd sends some one into yo' life, er 'cross yo' path, an' lets 'em jes' touch yo' life, an' make it full ob gladness an' song? Sometimes dey don't stay long, but de help an' de good stays wid us. Well, chile, de ones what come dat-a-way may not wear de wings an' de white robes, but dey's de messengers, de breezes from heaben. De Mastah he done promise not to widhold any good t'ing, an' to supply all yo' needs. Honey, when you's tiahed an' 'scouraged you jes' hole on, kase yo' needs am known, an' sho' nuf de messengers, de breezes from heaben, am on de way to'ards you. Dar am many on dis yer ole earth who am not called angels, but who am de breezes right from de frone ob God. Maybe dey don't say much, maybe dey don't do much, but while dey's wid you, an' after dey's gone, you feels de Mastah has be'n yer, an' yo' soul am 'freshed an' 'couraged.

"Chile, has you done noticed dat de breezes am on de go all de time? Dat am what keeps 'em sweet an' fresh; dey jes' strikes a bush yer, an' a tree dar, dey sets it laffin', an' goes right on; dey seems to stop a while 'mong de roses, but dey comes 'way full ob gladness, an' scatters it all 'roun' jes' laik dey's glad, so glad dey kain't help gwine on an' giv-in' out de good t'ings what dey gets. Honey, dar may be angels wid white wings an' white robes, but de messengers ob God what am makin' dis yer ole earth full ob perfume, full ob sweetness, full ob song, full ob gladness, am de men an' de women what am ebery day ketchin' de spirit ob de Mastah, an' passin' it on. Deys a heap mo' breezes from heaben dan dose you sings 'bout what don't mean anyt'ing.

"Sometimes it sho' do look laik de Lawd he done forgit all 'bout dis yer poo' chile, but 'bout dat time de breezes am standin' right plum' ober me, or comin' to'ards me, jes' waitin' fo' me to look up. De breezes am not allus sweetest an' purest neah de ground; de way to do am to look up an' see de good t'ings what de Lawd has fo' you, fo' sho' nuf de Lawd am sendin' 'em in ebery d'rection. De world am full ob men an' women what needs you or what you needs. You should jes' ketch de breezes from heaben, keep 'em long 'nuf to 'propriate 'em to yo'se'f, den pass 'em out, pass 'em 'long filled wid a new gladness an' a new sweetness."—Prof. J. W. Lawrance, in Western Christian Advocate.

Daniel Webster on the Bible

Daniel Webster was not a professing Christian, but he placed the highest value on the Bible. Concerning it he said, "If we abide by the principles taught in the Bible, our country will go on prospering, but if we and our posterity neglect its instructions and authority, no man can tell how sudden a catastrophe may overwhelm us and bury all our glory in profound obscurity." Again he says, "I have read it through many times. I now make a practice of going through it once a year. It is a book of all others for lawyers and divines, and I pity the man who cannot find in it a rich supply of thought and rules for conduct. From the time at my mother's feet or on my father's knee I first learned to lisp verses from the sacred writings, they have been my daily and vigilant contemplation. If there be anything in my style or thought to be commended, the credit is due to my kind parents for instilling into my mind an early love of the Scriptures."

Do you read the Book of Books?

The greatest minds of the past and present have made it a part of their daily duties.

The brains of over nineteen centuries have fed on it.

We recommend its daily reading.

It will start the day right, shaping and molding your acts according to its teachings.

It will bring you nearer God.—The Home Defender.

Gethsemane

For every one of us, sooner or later, the Gethsemane of life must come. It may be the Gethsemane of farewells that wring the heart of the death-beds of those we love; it may be the Gethsemane of remorse and of well-nigh despair for sins that we will not, but which we say we cannot, overcome. In that Gethsemane—aye, even in that Gethsemane of sin—no angel merely, but Christ himself, who bore the burden of our sins, will, if we seek him, come to comfort us. He will, if, being in agony, we pray. He can be touched, he is touched, with the feeling of our infirmities. He, too, has trodden the wine-press of agony alone; he, too, has lain face downward in the night upon the ground, and the comfort which then came to him he has bequeathed to us—even the comfort, the help, the peace, the recovery, the light, the hope, the faith, the sustaining arm, the healing anodyne of prayer.—Dean Farrar.

Going to a Million

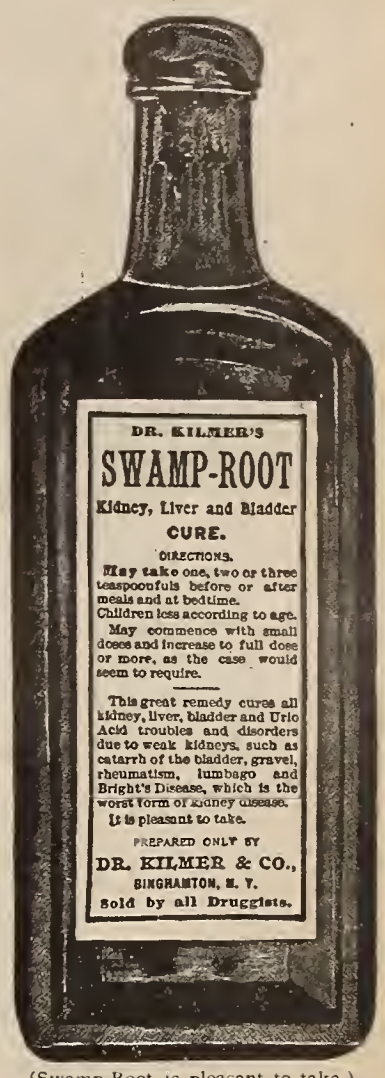
A million circulation is the mark we are aiming at. Twenty-five cents for twenty-four numbers. Your good-will, and FARM AND FIRESIDE will do it.

ARE YOUR KIDNEYS WEAK?

Thousands of Women Have Kidney Trouble and Never Suspect It

WOMEN suffer untold misery because the nature of their disease is not always correctly understood; in many cases when doctoring, they are led to believe that womb trouble or female weakness of some sort is responsible for their ills, when in fact disordered kidneys are the chief cause of their distressing troubles. Perhaps you suffer almost continually with pain in the back, bearing-down feelings, headache and utter exhaustion.

Your poor health makes you nervous, irritable, and at times despondent; but thousands of just such suffering or broken-down women are being restored to health and strength every day by the use of that wonderful discovery, Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy.



(Swamp-Root is pleasant to take.)

Didn't Know I Had Kidney Trouble

I had tried so many remedies without their having benefited me that I was about discouraged, but in a few days after taking your wonderful Swamp-Root I began to feel better.

I was out of health and run down generally; had no appetite, was dizzy and suffered with headache most of the time. I did not know that my kidneys were the cause of my trouble, but somehow felt they might be, and I began taking Swamp-Root, as above stated. There is such a pleasant taste to Swamp-Root, and it goes right to the spot and drives disease out of the system. It has cured me, making me stronger and better in every way, and I cheerfully recommend it to all sufferers.

Gratefully yours,
MRS. A. L. WALKER,
46 West Linden St., Atlanta, Ga.

Not only does Swamp-Root bring new life and activity to the kidneys, the cause of the trouble, but by treating the kidneys it acts as a general tonic and food for the entire constitution.

The mild and extraordinary effect of the world-famous kidney and bladder remedy, Swamp-Root, is soon realized. It stands the highest for its wonderful cures of the most distressing cases. A trial will convince any one—and you may have a sample bottle sent free by mail.

To Prove What SWAMP-ROOT, the Great Kidney, Liver and Bladder Remedy, Will Do for YOU, Every Reader of the Farm and Fireside May Have a Sample Bottle FREE by Mail.

SPECIAL NOTICE.—So successful is Swamp-Root in promptly curing even the most distressing cases, that to prove its wonderful merits you may have a sample bottle and a book of valuable information, both sent absolutely free by mail. The book contains many of the thousands upon thousands of testimonial letters received from men and woman cured. The value and success of Swamp-Root is so well known that our readers are advised to send for a sample bottle.

In writing to Dr. Kilmer & Co., Binghamton, N. Y., be sure to say that you read this generous offer in the FARM AND FIRESIDE.

Swamp-Root is pleasant to take, and you can purchase the regular fifty-cent and one-dollar size bottles at the drug-stores everywhere. Don't make any mistake, but remember the name, Swamp-Root, Dr. Kilmer's Swamp-Root, and the address, Binghamton, N. Y., on every bottle.

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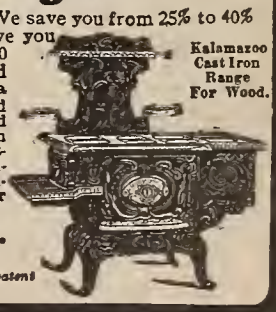
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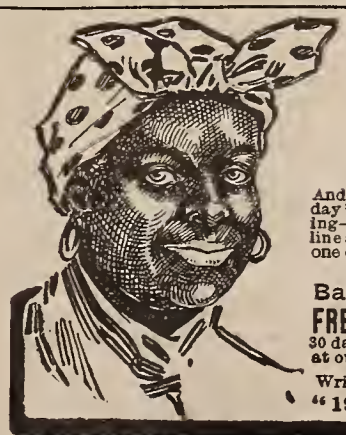

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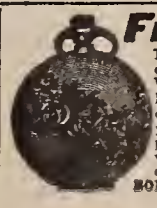

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Don't buy your spring outfit before you see our Woman's Spring Catalogue. It contains a fine showing of everything you will need in wearing apparel. The latest and most fashionable garments just selected by our New York buyers, all priced at figures far lower than you can buy such excellent goods for elsewhere. There will be no trouble to make a selection—you will see so many nice things at such reasonable prices.

Our Shirt Waist Suits range in price from 95 cents to $18.50; our Walking Skirts from $1.28 to $7.50. These are reliable goods that will please—excellent values at the price. We will not handle worthless shoddy.

We show here a Walking Skirt for $1.65 made of a serviceable Melton in dark Oxford gray. It would cost you $2.50 to $3.00 elsewhere. The Shirt Waist Suit at $2.48 is made of fine dress cambric, pearl gray ground with hair lines of blue—a beauty retailing everywhere at $4.00 to $6.00

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Many Women

Continue to sweep with the old-fashioned corn broom, because of the mistaken belief that it is more economical than the carpet sweeper. — Just consider that a

BISSELL Sweeper

will outlast fifty brooms, and then you will see its great economy. The very latest improved "Cyco" Bissell costs but from ***$2.50 to $4.00,*** whereas fifty corn brooms cost from $15.00 to $20.00.

The foregoing is the saving of the Bissell in dollars and cents, but think of its more important saving and economy in preserving your carpets, curtains, draperies, as well as your health and energies. No clouds of dust, no backaches, no sore hands, no distressed feelings, when you use the ***Bissell,*** and 96 per cent less effort.

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How to Dress

SHORT ETON WITH VEST AND NINE-GORED STRAPPED-SEAM SKIRT

EARLY spring is the time of year when women generally turn their thoughts to clothes which will be a little newer in style and design than those that have stood the storms of winter. It is at this season that one must think of "Easter costumes" and be prepared to make them, or have them made, according to the prevailing mode.

Short Eton with Vest and Nine-Gored Strapped-Seam Skirt

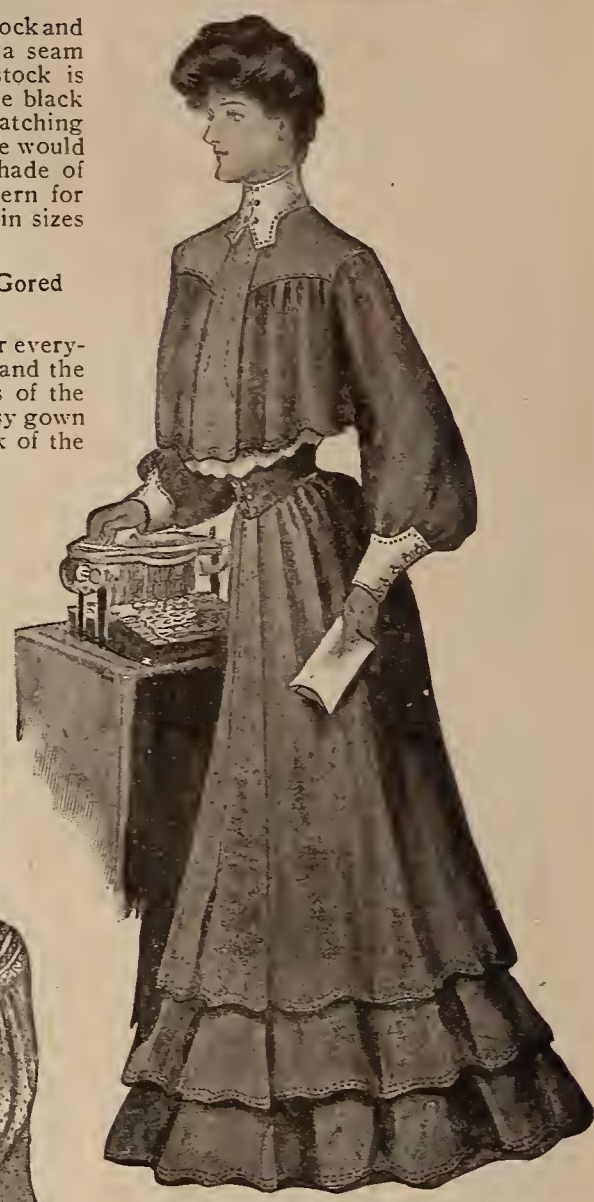
For the woman who feels she must look to the near future as well as the present in deciding upon the style of her clothes, this Eton costume will exactly fit her needs. Eton jackets will be worn throughout the spring; in fact, they will be one of the leading styles, dividing honors with the bolero. This Eton is particularly good style for the young woman who is the opposite of slender. It is made with a deep vest, which gives a becoming length of line to the waist in front. At the back and the sides the Eton is finished two inches above the waist-line. The front of the jacket is cut out at the neck, showing the waist worn with it. It is finished with a deep flat collar, which may be of heavy antique lace or of scrim richly embroidered. The small bishop-sleeves, which have but little fullness, and that all below the elbow, are finished with a cuff which matches the collar. The nine-gored strapped-seam skirt has a graceful flare at the bottom. It is made with a habit-back, and is the long walking-length. Each seam of the skirt is strapped with a stitched band, which ends just where the flare begins. Serge is a practical, serviceable material for this costume. A light-weight covert cloth is also to be recommended. For later in the season either homespun or mohair would be good material to use. The collar and cuffs may be of suede, either stitched or embroidered, if preferred. The pattern for the Short Eton Jacket, No. 231, is cut in sizes 34, 36, 38 and 40. The pattern for the Nine-gored Strapped-seam Skirt, No. 232, is cut for 22, 24, 26 and 28 waist measures.

Fancy Blouse

It is the sleeves which give the smart new touch to this blouse. They are puffed to the elbow, with the upper portion laid in tucks. Below the elbow they are a mass of lace or lingerie frills, tumbling one over the other. The blouse itself is a simple model, made the same back and front. It is laid in tucks below the lace collar. The tucks open out just above the bust to form the fullness. The stock and lace collar are in one piece, with a seam on the shoulder. In front the stock is trimmed with a double row of little black velvet bows and a pretty jabot matching the frills on the sleeves. This blouse would be very effective in any pretty shade of soft silk like Louisine. The pattern for the Fancy Blouse, No. 239, is cut in sizes 32, 34, 36 and 38.

Deep-Yoked Blouse and Five-Gored Yoke Skirt

This costume is a simple dress for everyday home wear. Both the blouse and the skirt show a yoke made of bands of the material and fagoting. It is an easy gown to make. The front and the back of the blouse are gathered to the deep round yoke. The blouse closes in the back. The front is made with a slight pouch. The sleeve is a graceful variation of the bishop-sleeve. It is the pattern for a full bishop-sleeve made with three deep tucks reaching from the shoulder down to the elbow, the fullness below the elbow being gathered into a deep cuff. The yoke is not transparent, but is made on a lining. The blouse is worn over the skirt, and finished with a narrow round belt. The skirt is gathered slightly to the round yoke, which is shaped to have a slight dip in front. The back is gathered the same as the front. The skirt is very full at the bottom, and is finished with three tucks and a hem. Fancy etamine could be used for this gown, also any of the inexpensive silks, challis, or crêpe cloth with a silk dot. The pattern for the Deep-yoked Blouse, No. 233, is cut in sizes 34, 36 and 38. The pattern for the Five-gored Yoke Skirt, No. 234, is cut for 22, 24 and 26 waist measures.



LOOSE BOLERO AND FULL SKIRT GATHERED AT THE WAIST

DEEP-YOKED BLOUSE AND FIVE-GORED SKIRT

Loose Bolero and Full Skirt Gathered at the Waist

The girl who has plenty of time to devote to her clothes will particularly appreciate this costume, especially if she anticipates going to the city or town in the near future to fill a position in an office.

The short full bolero, as well as the blouse which shows beneath it, are mounted on a waist-lining. The bolero has a deep yoke back and front, to which the full portion is gathered. It fastens under the box-plait down the front. The full bishop-sleeves are finished with a deep buttoned cuff which matches the collar. The wide girdle is a part of the waist, and is made on the same lining. The skirt is one of the very new models—one which will be worn all through the spring and summer. It is a very full skirt, with the fullness gathered slightly at the waist. The skirt is made with three flounces, which are mounted on a five-gored foundation-skirt. Down the front is a graduated box-plait. At the back the skirt is full. This gown could be made of one of the new mohairs or any of the pretty soft silk-and-wool novelty goods. The pattern for the Loose Bolero, No. 235, is cut in sizes 32, 34 and 36. The pattern for the Full Skirt, No. 236, is cut for 22, 24 and 26 waist measures.

FANCY BLOUSE

PATTERNS

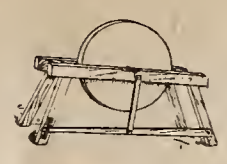
To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

Our fashion catalogue will be sent free upon request.

Prize Puzzles

We Want to be Neighborly, and so Invite all of Our Readers to Use Our Grindstone. It Will Sharpen Your Wits, Quicken the Intellect, Afford Healthful Recreation, and Give Innocent Amusement and Entertainment.

Residents of Springfield, Ohio, are not allowed to enter the contests.



GARDEN-VEGETABLES PUZZLE

In the Following Telephone Conversation are Hidden Nine Garden Vegetables. The Picture Hides a Tenth. Find All Ten

AN AFTERNOON CALL

"Hello! Will you be etching this afternoon, Ionia?"

"Yes, Conrad, I shall. Why?"

"I'd like to be an enthusiastic observer, if I may. I love to watch you etch."

"Come, then, and appease your hunger for art. We'll have a little luncheon, with tea poured from my china pot, at one o'clock. At two I begin etching. Afterward we'll take a bicycle spin. A 'chainless' is at your disposal."

"Thanks. You're awfully kind. I'll come out by trolley-car, Roth taking my horse home from the station. Now I'll go to ma to tell her I'm coming. Good-by."

"Good-by."

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before March 15th.

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a condensed "History of the United States" will be given for the first correct list of answers received from each state and territory. This means a book for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the prize books will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

ANSWERS TO PUZZLES IN THE FEBRUARY 1st ISSUE

Six Popular Quotations

1—"Our hearts, our hopes, are all with thee,
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears,
Are all with thee, are all with thee!"
—Longfellow.

2—"Scatter plenty o'er a smiling land."
—Gray.

3—"Across the narrow beach we flit,
One little sandpiper and I;
And fast I gather, bit by bit,
The scattered driftwood, bleached and dry."
—Celia Thaxter.

4—"And her sunny locks hang on her temples like a golden fleece."—Shakespeare.

5—"Breathes there a man with soul so dead,
Who never to himself hath said,
'This is my own, my native land!'"
—Scott.

6—"'Tis the last rose of summer
Left blooming alone."
—Moore.

The cash prizes are awarded as follows:

Woman's cash prize, two dollars—Mrs. Ethel Howe, La Plume, Pennsylvania.

Girl's cash prize, two dollars—Miss Jessie A. Tillinghast, Factoryville, Pennsylvania.

Man's cash prize, two dollars—Mr. Will C. Heath, Manchester, New Hampshire.

Boy's cash prize, two dollars—Master Earl J. Frazier, Davenport, New York.

As a consolation prize, a monotint picture of George Washington is awarded to the following persons, whose lists of answers were the first to reach us from their respective states:

Illinois—Miss Edna Risor, Mount Vernon.
Iowa—Miss Carrie E. Weaver, Des Moines.
Montana—Arthur Sheperd, East Helena.
New Hampshire—Mrs. M. L. Hartshorn, Manchester.
New York—Miss Mary D. Frazier, Davenport.
Ohio—Miss Grace M. Spacht, Williamstown.
Pennsylvania—W. A. Tillinghast, Scranton.

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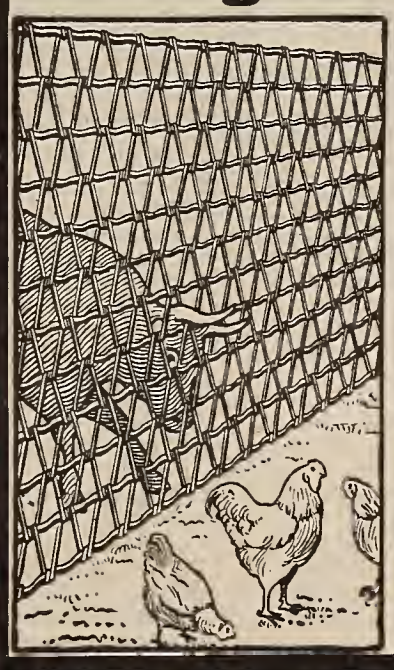

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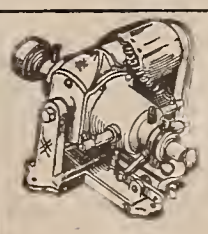

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Tryphena's Tax-Title

By ALBERT LATHROP LAWRENCE

WASHTENAW is but a country village, linked to the outside world by a stage which runs daily between it and the pretentious town of Shiawassee. Few amusements ever come there, and thrown upon their own resources, the inhabitants are prone to take great liberties in providing the fun which otherwise would be denied them. The prime mover in these affairs—which are sometimes questionable, sometimes enforce a moral—is Lemuel Crane.

Lemuel is the only man in the village who takes a daily paper. Every noon he comes down to Lawton's store, in the rear of which is the post-office, and receives his mail. As a rule he sits a while about the stove if in winter, on the platform if in summer, and always there are gathered about him from three or four to a dozen other men.

He was inside on a day in February, when the noise of one stamping snow on the platform without was heard. Lawton, turning his head, remarked, "Old Wharton!" before the door opened to admit the newcomer.

Silvanus Wharton was a middle-sized man with smooth-shaven lip, but with a beard on the sides of his face and chin, in which the gray was beginning to show. His feet dragged a little as he came down the store, and he bore the stoop that was common with most of the Washtenaw men. His clothing seemed to indicate straitened circumstances, but he was known to be the richest man in the township.

"A little more of that tea, if you please, Mr. Lawton," Silvanus said, in the tones which he thought were best calculated to save him a penny. "I'll take ten cents' worth to-day," he added, as if the other time he had taken but five, and that this increase would make Lawton wealthy, a thing which it was good of him to do. Then he leaned over the counter, so those about the stove should not hear. "You let me have half a pound for that, Mr. Lawton," he whispered, to remind the storekeeper of his former partiality.

"Say, Wharton," cried one of the loungers, "Lem here says that Ike Marvin told him that if something didn't happen so that he could have a trial in his court pretty soon he'd have you up for cruelty to animals."

"I ain't been cruel to no animals," replied Wharton, turning away from the counter. "Marvin, 'cause he's got to be justice of the peace, needn't think he can put his nose into everything that's going on in the village."

"Well, he says you have," rejoined the other, positively. "He says you make it a practice to squeeze a cent so the poor bird is crushed beyond recognition. Lawton there has got one that he's going to offer in evidence."

A loud laugh rose from the group about the stove.

"You fellers all think I'm just made of money because I've got a lot of land. I tell you, Bolton," Wharton said, addressing the one who had attacked him, "a feller may have a lot of land and be all-fired hard up. I don't get any sympathy from my townspeople, as I ought to. I know how you talk about me behind my back, and some of you right to my face. I'd be ashamed to treat a dog as you do me. I know you're telling around that I'm tighter than the bark on a tree. But I'm jest as free as I dare to be with the little money that I have, looking out as I must now for my old age. The rent on the farm I've got don't pay for the repairs and the taxes, so there's a continual running behind all the time."

A second laugh greeted his reference to the taxes.

"Yes," interjected Bolton, "I heard that you had got Sam Runnel to pay the taxes for you."

This exploded the group.

Wharton had been so parsimonious the last few years that he had neglected to pay his taxes. As a consequence the land had been advertised and put on sale. Runnel, on the lookout for every such opportunity, had secured the title to it from the state for a mere song. Wharton, however, refused to give up the property, and the matter had been appealed to the courts, where it now waited a final settlement.

"Here, here," shouted Crane, "stop your quarreling, boys, while I read you a bit from the paper. It's what they're doing up in the legislature at Lansing. It'll interest more than one feller in Michigan, and right here in Washtenaw, too, if it ever becomes a law."

Then he read: "Representative Doboson has introduced a bill to tax bachelors. It provides that every unmarried man of thirty-five shall pay a yearly tax of five dollars, and that the tax shall be increased five dollars each year until the age of forty-five is reached. After this last tax of fifty dollars is paid, if a man still prefers his single blessedness, he may do so without further interference from the state."

Wharton was suspicious of the group. He was the only bachelor present, so this at first seemed to be another thrust at him, concocted in the fertile brain of Lemuel Crane; but as the dry, expressionless tones continued, he saw that the phraseology was not Lemuel's, and was convinced that the words really appeared in the paper.

"You'll have to get a move on you, Wharton, or you'll have some big taxes to pay in the next few years," cried Bolton. And with that they all began laughing, talking and throwing at him whole volleys of gibes.

Wharton, generally in a whining mood, was aroused to defend himself. For a moment he swung his arms much as if he would knock some of them down; but in the end they were too many for him, and gathering up his penny parcels, he beat an angry retreat.

"I hope that bill will become a law," said Lemuel Crane, when the noise of their sport subsided. "It will take something just like that to make the old skinflint marry Trypheny Coldstalk. How long is it, boys—more than twenty years, ain't it—that he's been going there to see her? Why, I remember when we thought Silvanus Wharton was a pretty good feller. He and Trypheny used to go with us young people to all the dances everywhere. Fifteen and sixteen years ago it was the talk that they was going to be married next month, but that next month ain't seemed to have got around yet. And it never will till Silvanus finds out that he can live cheaper with a wife than without."

"It's a shame to serve Trypheny that way!" declared Lawton. "Trypheny's a good girl."

"Of course she is," affirmed Bolton. "He ought to let up going to see her, and give her a chance with some other feller."

"There ain't much chance when you come to think of it; all the unmarried fellers hereabouts now are nothing but boys," put in Lemuel. "And besides, I think Trypheny sets a good deal by Silvanus. Of course, she can't ask him to marry her. And if he won't—if we could make it seem right to her, I'd be one to go to old Wharton and force him to marry her at the muzzle of a shot-gun if it was necessary!"

"It would be a good idea—but there's Trypheny!"

"Yes, there's Trypheny!" all admitted.

"If we'd only known about them land-taxes in time we might have got some of them bought in Trypheny's name. Then he'd have married her to get rid of paying them," said Lemuel. "But maybe there'll be some more sometime. I think Trypheny would make a better man of him if she was his wife. She would feel more at liberty to boss him around. What can she say to him now?"

It was unanimously agreed that Tryphena was acting very womanly, and that they had let a golden opportunity pass in not taking advantage of the delinquent-tax sales. They promised one another, however, that something should be done soon—that twenty more years were not to go on as the last twenty had gone.

But three of those twenty did go on just as all years go in Washtenaw. The Doboson Bill failed to become a law. Wharton grew more and more miserly. His case in court went against him, and the taxes, which at first could have been settled for less than a hundred dollars, cost him a thousand. Wharton tried to make this up by denying himself to a greater degree than ever before. He gave up his county paper—a weekly—and withdrew himself more and more from his townspeople, until he came to know but little of what happened in the world outside.

Summer was advancing again, and the store-loungers had left the stove for a place just within the open door. One more warm day would find them seated on the platform without. Lemuel Crane was there, having brought down some eggs to exchange for coffee and sugar, and was waiting now for the stage to bring the mail containing his daily paper. The spring election, which had just been held, had resulted in a landslide, carrying Lemuel into the office of town treasurer, and making his friend Bolton the town clerk. This revolutionary change was the subject of all conversation.

"Say, Wharton," called Lemuel, seeing that man in the act of slinking by, "now that I'm elected town treasurer, I'll do what I can to have you exempt from all taxation."

"I wish you would, Mr. Crane," whined Wharton, who had got to that pass where he would accept anything that was said to him.

"And it's about time that the town began to support you," Lemuel continued. "Bolton wants to throw in clothing, too—at least a necktie. He suggests that twenty feet of Lawton's best inch rope would do very well. But I want to do better by you—"

A burst of coarse laughter drowned Lemuel's concluding words, and then Wharton's whine was heard.

"You fellers can make fun of me now, but the time may come when you'll be in want. Not but that I've got enough to feed and clothe me if I calculate close, but it don't leave a penny over—not a penny! And I don't get any sympathy from my neighbors, them that ought to feel sorry for a poor lone man. You point your finger at me, and say things that ain't true, and you learn your children to do so, and throw stones at my house. There'll be a judgment come out of heaven on you for it all. The Lord don't forget his poor always!"

The loungers greeted this with a derisive laugh.

"Wharton," rejoined Bolton, "I'm coming down to your house with a search-warrant one of these days. The government has concluded that these hard times are caused by your hoarding away all the gold. We silver men weren't elected for nothing."

Again the crowd roared. The miser was moving away.

"Yes, sir," said Lawton's boy, in an excited whisper, turning to the group, "I was down to old Wharton's house the other day when he was away, and I seed in his cellar eleven barrels of gold! I counted 'em!"

The shout at the boy's credulity was so boisterous that Tryphena Coldstalk, a quarter of a mile away, heard it and paused in the act of hanging out her clothes. "There, they're pestering poor Silvanus again!" she mourned. "I don't see why men want to act so. What if Silvanus is a miser? It's a thing to pity, and not a thing to make fun of. It's a disease, like a sore, and should be treated with healing ointments and—and love. Oh, I wish I was a man! Then—then—then— No; Silvanus must speak first, if it kills us both!"

The loungers at the store sought other diversion after Wharton left. Lemuel took up a paper, which he recognized as the one that had been in the bottom of his basket. The date was three years back, but he looked it through carelessly while listening to the talk about him. As he read, his eyes fixed on a paragraph regarding the legislature. Suddenly the possibilities of a huge joke came to him.

Alone in the town clerk's office, Lemuel laid his plan before his friend. When Bolton grasped the other's idea he sprang to his feet and opened his mouth preparatory to a yell that would raise the roof. But such a cavern appearing suddenly in his face was fatal to the intended action, for it closed the clerk's eyes, and so prevented him from seeing Lemuel's great hand coming through the air.

"That's just what I got you alone here for," said Lemuel, effectually smothering the cry. "I was afraid you'd give it away. This is a serious thing, and we've got to act serious."

He had released Bolton now, and the clerk, red in the face, with tears running down his cheeks, was holding his sides, while his whole frame was shaking heavily with noiseless mirth.

"What are you going to have me do?" asked Bolton, when he could stop crying.

"You've got to make out the title—the deed, you know. I suppose we'll both have to sign it. How is that, do you know? Well, we can arrange it, anyway. We can use one of those regular land-title blanks, can't we?"

"How much are you going to make the delinquent tax?" inquired the clerk, laughing afresh.

"Why, there'll be three years, at forty dollars and forty-five and fifty, with interest and charges—say one hundred and fifty dollars in all. Enough to make old Wharton groan."

"And are you going to make Trypheny pay that?"

"I'll take care of that, Bolton. Of course not!" the treasurer added.

When the deed was made out, Lemuel and Bolton marched with it in solemn procession to the home of Tryphena Coldstalk.

Tryphena ushered them into her darkened parlor, where all sat a moment in silence, as befitted so grave business.

"Trypheny," began Lemuel, with something like a lump in his throat, "you and I have grown—"

"Oh, mercy, Mr. Crane, tell me right out! Is—is—is— He was here last night!"

"No, Trypheny, Silvanus ain't dead. I'm glad to find you feeling that way toward him. I was afraid it was different. I am encouraged to believe that all will be well now. It makes the duty which this town has to perform lighter—easier; the duty which I have to perform." Lemuel seemed a little mixed, so he took a fresh start.

"Trypheny, you feel to trust me, don't you?" he asked. "You don't for a minute think I would trifle with you—that I would tell you a thing that wasn't true?"

"Oh dear, no, Mr. Crane. I—"

But Lemuel, assured, pushed on with his little speech. "Men have been passing laws for years and years, Trypheny, for the protection of women. Some have been good, and some have been bad; but it's not for me to say which have been which. And which don't enter into our business, either. Now, three years ago our state passed a law placing a tax on all bachelors—that is, unmarried men—over thirty-five year old, till they was forty-five, when they don't tax them any more. Well—" He hesitated, as if not knowing how to go on. "And now," he began, but was interrupted.

Tryphena's face had become very red. She moved resentfully in her chair. "How much is my tax, Mr. Crane? You needn't explain any more; I understand. You men have put a tax on old mai—on unmarried women now!"

"You wrong the men. It is not that, Trypheny—far from it," said Lemuel Crane.

The clerk began to snicker. He had taken a seat back of Tryphena for fear his face should not always preserve the right emotions.

"Don't mind Mr. Bolton, Trypheny," Lemuel said. "He has trouble with his throat this morning."

"Oh, sha'n't I get you some of my—"

"No, no," Lemuel hastened to add; "I want your undivided attention, Trypheny. Mr. Bolton, go into the open air, and you will be better!" he commanded, and moved his hand imperatively toward the door.

"I shall be all right now," the clerk said, huskily, and became quiet.

"No, there has no tax ever been placed on old mai—on unmarried women," Lemuel resumed. "But as I said, there was a tax put upon bachelors in this state, and it has been in force three years now. Well, Trypheny, we have living among us one who is subject to this tax. One who I am deeply interested in, and who, I trusted, you was deeply interested in, too; and your words this morning has shown me that my trust was not in vain. Need I tell you who this one is?"

"Not if you mean Silvanus," Trypheny said, blushing and looking very coy.

"I do," replied Lemuel, impressively.

"But what is it?" she began, fearing something from the solemn face before her.

"He hasn't paid these taxes!" said Lemuel, with awful import. "You remember what was done with his land a few years ago when he neglected to pay the taxes on it. It was sold."

"But Silvanus ain't to be sold!" she cried, in horror.

"I am sorry to say that he is, Trypheny." Lemuel took a legal document from his pocket, and referred to it. "That is, a tax-title upon the person of Silvanus Wharton, of the town of Washtenaw, County of Wolverine, State of Michigan, is to be sold—has been sold, I might say, for the matter has all been attended to, and it only remains for you to accept and approve.

"You see, Trypheny," he explained, "we—that is, a number of Silvanus' old friends—didn't want to see him sold to some unresponsible person who might misuse him—work him too hard, you know. So we subscribed a sum, and bought the title in your name. And now he's yours, Trypheny."

"Mine?" Tryphena said, warming with her love.

"Yes, he's yours—'to have and to hold,' as the title says," and Lemuel placed the legal document in her lap.

"To hold," she murmured, lingering on the word.

"You accept, do you, Trypheny?" Lemuel asked, rising.

"Oh—I! How much was the taxes?" she asked, starting from her dream, with much confusion.

"Didn't I state? A hundred and fifty dollars."

"Oh!" with a little gasp. "I was thinking a—a—of the a—propriety of accepting so—so—so valuable a—a gift from so many men."

Bolton made a plunge for fresh air.

"Oh, that's all right, Trypheny. We have kept it very quiet. But if it's going to really trouble you,

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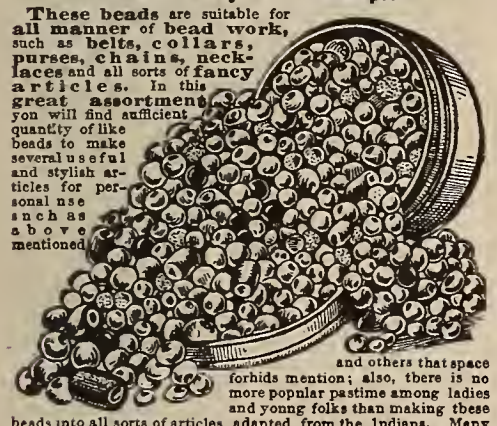

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why, you can pay me, I suppose. I couldn't give the money back to the men. I—I might turn it into the fund for the new Methodist church. But I shouldn't ever speak of it if I was you, Trypheny—that is, explain; you just let me turn it over as coming from you, and it'll be all right."

"That will do," Tryphena said, with a little burst of relief.

"Then it only remains to turn the property over to you," Lemuel said, and bowed his departure.

Lemuel found Bolton doubled over the gate-post.

"Thunderation, man, if you make a mess of this now I shall wish I'd put an end to you up in the office! Brace up now, and come on!"

"Where now?" asked the clerk, coughing.

"To old Wharton's. We've got to deliver the property. You needn't cry so; it ain't a funeral."

They found the miser at home.

"We have come to you, Silvanus, as officers of the town of Washtenaw," Lemuel began. "We have a solemn duty to perform. I hope you will recognize the law that is back of us, and make no resistance." Then he went on, in his emotionless voice, to explain fully his errand.

"What! I'm sold for taxes?" demanded the astonished man, placing his palm upon his breast. "It ain't right! It can't be done! I've never been notified of such a law!"

"They don't notify people of laws except through the newspapers. If you hadn't been so close-fisted, Silvanus, you might have known all about it. You have stopped taking papers, and drawn yourself away from your fellow-men, and this has come upon you now as a judgment."

"I tell you it ain't right! It ain't constitutional! I'll fight it!"

"I would, too, Silvanus! I would fight it as I did that little matter with Runnel. Let's see, how much did that cost you, a thousand dollars? Maybe you've got money to burn. But I don't believe I would, Silvanus. It ain't Runnel this time. Did I tell you who it was? Trypheny Coldstalk."

"Trypheny!" murmured the astonished and distressed miser.

"Yes," said Lemuel. "She won't be so hard to satisfy as Runnel was. It seems to me that you might find a way out and not have it cost you very much—leastwise, keep the cost all in the family, as it was. But that ain't nothing to us. You're her property now, and all we've got to do is to deliver you over. And you can make such a settlement with her as you please."

There was a moment's silence.

"Bolton wanted me to bring the sheriff along, but I told him I guessed you'd go with me. I was right, wasn't I, Silvanus?"

Wharton made no reply. He had suddenly become very thoughtful. But when Lemuel beckoned, he followed as submissive as a lamb, and together they proceeded to the other home, where Tryphena awaited them with throbbing heart.

Tryphena appeared greatly embarrassed. One moment her action indicated a desire to flee, another she seemed about to charge upon the officers and rescue her tardy lover. Silvanus was the one to speak, and his look was full of reproach.

"Trypheny! how could you?"

"I did it, Silvanus, to save you from hard-hearted men," she replied, with feeling.

Then there was an awkward pause. Silvanus had come to feel that if he would save himself he must act.

"Can I see you alone, Trypheny—a minute?" he pleaded, looking about him like a caged animal.

"Yes, Silvanus. In this way," she said, and led him through a door into a side room.

Lemuel and his friend had time to exchange but a word before the door opened. Back of Silvanus' head Tryphena's curls appeared dancing with a new joy. Silvanus' own face was lighted with an expression which easily said that he had outwitted his enemies.

"It's all right, Mr. Crane," he called. "Trypheny and I are going to marry."

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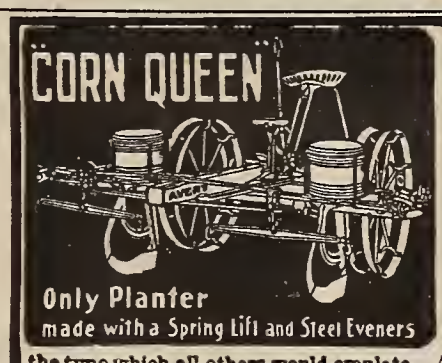

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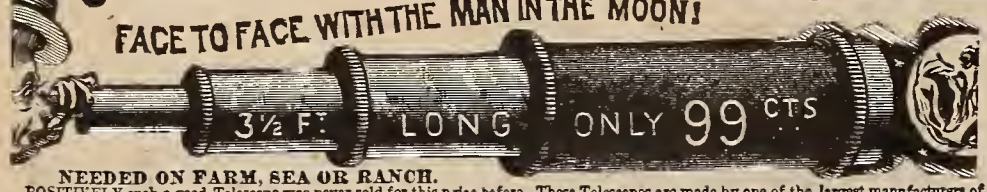

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March 1 Farm and Fireside.

MENTION THIS PAPER.

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The Young People

Puss in Boots

"I'LL tell ye," said Norah the nurse, "a shtory iv th' days whin cats c'u'd talk.

"In thim days," continued Norah, "a poor felly was lift with niver a thing between him an' shtarvation but a cat."

"I don't see why he couldn't go to work and earn a living," commented Jessie Corwin, dreamily.

"'Twas not th' cushtom iv th' time," explained Norah. "In a fairy shtory ye niver hear iv anny wan wor-rkin' excipt th' poor wood-chopper, an' th' lad, not bein' a wood-chopper, had to make his livin' off th' cat. I think 'twas onlawful f'r anny wan ilse to wor-rk, but annyhow ye niver r-read iv wan iv th' poor lads thryin' it. Howiver, 'twas not so bad as it lukked, f'r all th' cat wanted was a pair iv boots to be able to take care iv th' two iv thim."

"Why should the cat want boots?" demanded Carl.

"Don't ye know that?" asked Norah, just to gain time.

"I tried to put a pair of doll's shoes on our cat once," asserted Tommy, "and she didn't like it a bit."

"Iv coorse not," said Norah, with calm superiority, "an' I'll tell ye why. She's not a talkin' cat. If she'd been wan iv th' talkin' kind she'd ask ye f'r boots. Whin ye find a cat that can talk an' won't wear boots, 'twill be time f'r ye to doubt th' shtory I'm tellin' ye. Well, this cat got th' boots, an' thin he caught a rabbit an' tuk it to th' king, sayin' it was from th' Earl iv Killarney."

"The Marquis of Carabas," corrected Jessie.

"Am I tellin' th' shtory, or are ye?" demanded Norah.

"You are, of course," said Ethel.

"Well, whin I'm tellin' th' shtory," said Norah. "I'll have a na-ame that will fit on me tongue. As a matther iv fact, th' thrue na-ame is Killarney, an' th' Ca-ra-ra-ra—bad luck to it!—is wan iv th' evil ray-silts iv th' Spanish War. Annyhow, 'twas th' Earl of Killarney that th' cat said, an' th' king was so pleased he said, 'Come again.' Ye see, 'tis th' wa-ay iv th' wor-rld to give to thim that has, an' a king has iverything excipt peace iv mind, so that's th' only thing no wan iver thries to give him."

"That's all new," asserted Tommy, somewhat bewildered.

"Iv coorse," returned Norah. "Th' thruth is always new. But I'll come back to th' shtory. A few days afther, th' cat caught two bir-rds an' tuk thim to th' king."

"It's a good thing," commented Jessie, thoughtfully, "that talking cats don't wear gloves as well as boots."

"F'r why?" demanded Norah.

"They couldn't catch birds with gloves," answered Jessie.

"How bright ye are!" said Norah. "That's why they don't wear thim, iv coorse. I meant to tell ye that, an' I f'rgot."

"Go on, Norah," urged Ethel.

"Bein' now on good ter-rms with th' king," Norah went on, "th' cat was f'r takin' his masther to th' pla-ace.

"'But me clo'es!' says th' Earl of Killarney.

"'F'r sure,' says th' cat. 'They don't fit.'

"''Tis th' material, an' not th' fit,' says th' Earl.

"'R-right ye are!' says th' cat. 'Th' material don't fit ye-er new na-ame.'"

"But why did he have to have a new name?" asked Carl. "Why did he have to be an earl?"

"Because," answered Norah, "there's a gir-rl in th' case, an' ye'll come to her afther th' shwim. Ye see, th' cat made him go in shwimmin' whin th' king was comin' that wa-ay, an' thin hid his clo'es, an' told th' king they were shtolen."

"That was a lie," asserted Tommy; "and heroes don't lie."

"No," admitted Norah, "but cats do. Ye see, 'twas all along iv th' doin's iv that shmart and disgr-raceful cat. Well, thin th' cat came to th' castle where th' ogre lived—

"'I hear,' says th' cat to th' ogre, 'that ye can tur-rn ye'ersilf into an animal.'

"'Watch me,' says th' ogre; 'an' he made a lion iv himself."

"I've wondered," remarked Jessie, "why the lion didn't kill the cat."

"I'm glad ye shpoke iv it," returned Norah. "'Tis a thing th' felly that wrote th' book f'rgot, but I'll tell ye why. Th' cat wint up th' old-gold curtains hangin' in th' door, jumped f'r a picture close to th' ceilin', an' he was peekin' over th' top iv th' frame befoore th' lion had time to gr-rowl.

"'Come down!' says th' lion.

"'Me fut's caught,' says th' cat. 'Can ye ma-ake a mouse iv ye-ersilf?'

"'I can,' says th' lion. 'Is ye-er fut shtill caught?'

"'It is,' says th' cat. Thin th' foolish ogre tur-rned himsilf into a mouse, an' with th' cry, 'Me fut's loose,' th' cat gave wan shpring that finished th' ogre."

"I'm awfully glad," said Ethel, "that you explained about the cat's foot being caught. It always seemed to me such a foolish thing for the ogre to make a mouse of himself when there was a cat in the room, but now I understand it."

"Iv coorse," Norah agreed, with gratified vanity; "'twas a bit iv shtrategy on th' part iv th' cat. An' havin' won, she tuk possession iv th' castle in th' na-ame iv th' Earl of Killarney, an' wint out to meet th' king. Well, th' king was already thinkin' what a fine thing 'tw'u'd be to ha-ave all these eshtates added to th' kingdom, an' he'd sint f'r th' princiss. Ye see, he was a modern ma-an, although he lived in 'wanst upon a time.' In th' old days they had a wa-ay iv gittin' what they wanted be fightin', but afther a bit they found 'twas aisier to do it be marryin', an' 'twas a lift to th' gir-rls to win what th' min c'u'dn't git."

"But he was king of a big country, wasn't he?" asked Carl.

"F'r sure," answered Norah.

"Then why should he be so anxious to have any more?"

"I'll tell ye," said Norah, confidentially. "'Twas to put taxes on it. There niver was a king that wasn't lukkin' f'r a new place to put taxes."

"What are taxes?" asked Jessie.

"Taxes," replied Norah, whose ideas of government were rather hazy, "are th' pinalty ye pa-ay f'r bein' bossed."

"Of course the princess married the Marquis of Carabas," suggested Ethel. Whereupon the nurse gazed at her with admiration.

"How can ye say that?" she asked. "'Tis a niver-endin' 'ra-ra' to me. But ye-re r-right. She married him, an' th' moral iv this is—"

"What?" asked all the children, as Norah paused.

"Ye niver can tell whether or not ye're in luck until ye've made th' bist iv what ye ha-ave."—Elliott Flower.

Always Take Time

Take time to breathe a morning prayer, asking God to keep you from evil and use you for his glory during the day.

Take time to read a few verses from God's Word each day.

Take time to be pleasant. A bright smile or a pleasant word falls like a sunbeam upon the hearts of those around us.

Take time to be polite. A gentle "I thank you," "If you please," "Excuse me," etc., even to an inferior, is no compromise of dignity, and you know

"True politeness is to say
The kindest things in the kindest way."

Take time to be patient with children. Patience and kindness will open a way for good influence over almost any child.

Take time to be thoughtful about the aged. Respect gray hairs even if they crown the head of a beggar.—Exchange.

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We want you to examine and try on our **$10.00 All Wool Tailor Made Suits** before paying out one cent, and know for yourself that our suits are strictly **All Wool,** properly tailored and perfect fitting. You will find them as good in every respect as suits you have paid $13.00 to $15.00 for.

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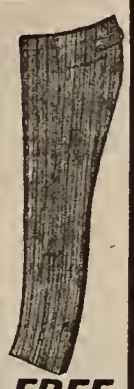

We make your suit and trousers exactly as ordered and send them to your express office for you to examine and try on. If you find them both as offered, pay the express agent $10. and the express charges, and both the All Wool Suit and the extra pair of $5. Trousers are yours.

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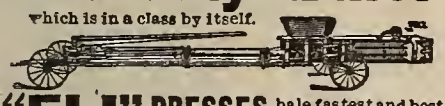

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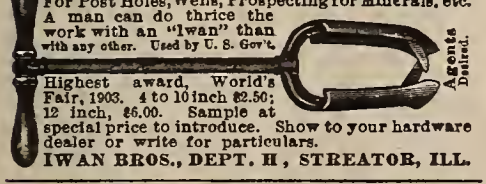

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WORK FOR CASH Chance for boys and girls. Invest nothing. We supply all and pay cash for selling Battles' Reliable Seeds. Write Dept. D for plan. Frank H. Battles, Seed Grower, Rochester, N.Y.

The Young People

Her Composition

LITTLE ZELDA was seven years old, and wrote many compositions at school, but one was treasured by parents and teachers, that she might read it when she was older. The subject was a difficult one—"What is a Fable?"

"Why," she said to her teacher, "I know a fable when I see it, but I don't know what it is when I have to say it. It seems very strange indeed. Must my composition be long?"

"Oh, no; short, by all means," answered the teacher. "Only tell what a fable is. You have been reading them. Now simply tell in your own language what a fable is, that is all."

Zelda seemed quite puzzled, but mama smiled, and told her as an encouragement that when she had written her composition she should have a coral necklace.

"Oh, mama, I shall try very hard. I shall think and think and think until I think it out." She wished for the coral necklace very much, but she also wished to please her mother.

After a time of deep thought and hard study, she brought her composition triumphantly to her teacher, and said, "There is my composition. It was hard, but I have told exactly—just exactly—what a fable is, as you told me to do. I read over my book of fables, and found out all about them."

The teacher took the composition from the little girl's hands, and read it. It had one great merit—it was quite short. It read: "A fable is a place where animals talk, which also they never do so."

The grown people laughed very much when they read it; but she won the coral necklace, as mama knew she had tried.—Brace Baxter, in Youth's Companion.

Half a Dozen Good Books

One of the most remarkable books of the past year, and one that deserves a careful reading, and will afford much pleasure, is "The Story of My Life," written by that wondrous young blind mute, Helen Keller. It is an excellent volume to place in the hands of the young; the contemplation of what this girl, with her limitations, has done will surely rouse the reader's ambition. Then, too, the book is beautifully written. It portrays a sweet nature, and there is about it a poetical, musical quality. At times the author may be a little uncertain in her choice of a word, but her descriptions of material things are almost incredible when one recalls that her knowledge of them is all gained through the agency of others, and that after the overcoming of many difficulties that lay in the way of communication.

James Lane Allen's book, "The Mettle of the Pasture," has been much discussed. I will not touch upon the ethical question involved, neither will I advise you to give the volume to your half-grown boys and girls. This last is not because of any immorality in the book. The story is clean and sweet, but the question of right and wrong is too deep, too far-reaching, to be solved by hasty, intolerant youth.

"The People of the Whirlpool" is an amusing book. Under its roses of laughter are the thorns of sarcasm, that may prick those who live for society—those who live for what they may seem to be instead of for what they are.

Horace Spencer Fiske's "Provincial Types of American Fiction" is a most helpful little book. It is one of those guides which bid us stay our eager steps and note the beauties that we are rushing by.

One of the books of two years ago that will never grow old to me is "The Blue Flower." It contains just the stories to read aloud and discuss with children. In them you will find beauty, poetry, history and inspiration.

"Mackinac and Lake Stories" is another volume of short stories that deserves a wide reading. It will prove of special interest to the person who has idled away a summer day on the "Fairy Isle," or sat dreaming by the side of one of our beautiful Great Lakes.

HOPE DARING.

How High is the Hat?

Most persons imagine that a stovepipe hat is much higher than it really is. A great deal of sport may be created by testing it in this way: Select some person, and have him point out on the wall what he supposes to be the height of a stovepipe hat, and see how near he comes to being exact. In nine cases out of ten the one selected will place his finger about a foot from the ground. You then place a hat under it, and to the surprise of all it will be found to be several inches too high. ELLA BARTLETT SIMMONS.

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Constipation and Indigestion may give rise to nothing more serious than a distressed feeling or discomfort due to an overworked or impoverished condition of the Digestive Organs. A dose or two of

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will easily put this right, but if neglected—if the early symptoms are disregarded—what a burden of illness may be the consequence.

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Injury by Stock Going Through Fence

J. W. writes: "A. and B. join places, and each has hogs in pasture. If A.'s hogs get through his share of the line fence, and kill one of B.'s hogs, can A. be made to pay for the dead hog?"

A. would most assuredly be liable for the killing of B.'s hog.

Husband Mentioned in Will

A. C. B., Illinois, inquires: "Does a married woman in making her will have to will her husband something, or is his dower right sufficient to make it a legal will?"

The husband need not be mentioned in the will; or if mentioned, need not be given anything.

Estate Settled Without Administration

C. D., California, asks: "If a man dies, with or without a will, leaving children thirty years old and older, can they settle the property themselves without going to law about it?"

Yes, if all debts are paid and all the outstanding accounts which are due the deceased are collected.

Inheritance in Illinois

Y. N., Illinois, writes: "Y. N.'s mother marries a second time, and a child is born of the second marriage. The second husband dies, leaving no will, but some property, and there is no guardian appointed for the child. The mother sells the land to Y. N., and she pays for it, and the child dies. Can the brothers and sisters of the child's father cause Y. N. trouble and take the land from Y. N.?"

As I understand the laws of Illinois, on the death of the child the mother would have inherited the child's share, and therefore her deed would be good. Better consult a local attorney.

Foreclosing Mortgage

M. A., Texas, wants to know: "If A. mortgaged lands to B., the mortgage being made payable in one year, and A. moves away from that place, but pays taxes on the land for two years, can B. close the mortgage and take the land and use it as his property without first notifying A.?"

The maker of the mortgage would be entitled to notice in some form. If he moved out of the state, the notice could be given by publication in a newspaper. If A. moves away, it is his duty to keep an eye open to see what is done. B. would not be required to run after him.

Woman Deeding or Willing Property

G. E. W. writes: "A man living in Indiana married a second time. He had heirs by his first wife, but none by his second wife. If after his death his second wife should deed land owned by her to his heirs, could they hold it if after her death her brothers should try to have the deed set aside? A part of the land she inherited from her folks, and part was accumulated after her marriage. If she makes a will of her personal property to his heirs, to be divided at her death, could her folks break that will and take her personal property, she being in her right mind at the time of making the will?"

A woman may deed or will her property to whom she chooses.

Sale of Lands of Deceased to Pay Debts

L., of Illinois, writes: "N. and his wife buy land, and both of their names are on the deed. N. buys another piece of land with just his name upon the deed. Then N. dies, and leaves no will and no children. What share does the widow get? Can N.'s father, mother and brother take the land from N.'s widow? Can the widow pay what N. owed upon the land, and keep it, or will it have to be settled in law?"

The best thing the widow can do is to have an administrator appointed, and let the husband's lands be sold to settle the husband's debts. By the laws of your state, if there are no children one half of the real estate goes to the widow, and one half to the husband's parents. You would therefore own three fourths of the tract that is in your own and your husband's name, and one half of what was in his name alone.

Going to a Million

Have you read the Important Announcement on the first page? You will be interested, and maybe a number of your friends will, too, if you will be good enough to have them read it.

LAMP-FITS.

How do you know what chimney fits your lamp?
Your grocer tells you.
How does he know?
He don't.
Do you, then?
That's about how lamps are fitted with chimneys by people who don't use my Index; and they complain of bad chimneys! Lamp-Fits, indeed! Do you want the Index? Free.

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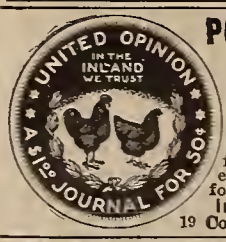

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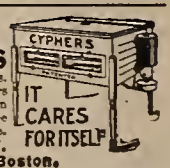

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The Family Physician

By R. B. HOUSE, M.D.

A Cure for Stuttering

STUTTERING may be cured, says a German doctor, by having the patient speak sentences with prolonged vowels and short consonants, so that even at the first lesson many sentences are spoken easily and fluently. The psychic effect is soon apparent, the patient gaining confidence in his ability to speak plainly, and the result is excellent in a very short time.

What is a Baby?

"What is a baby?" he asked, and then some one gave the following complicated definition: "The prince of wails, a dweller in lapland, the morning caller, noonday crawler, midnight brawler; the only possession that never excites envy; a key that opens the hearts of all classes, the rich and poor alike, in all countries; a stranger with unspeakable cheek that enters the house without a stitch to his back, and is received with open arms."

Diphtheria Contracted from Old Clothing

The necessity for thorough and careful disinfection of houses and clothing after infectious diseases is shown by an incident which recently occurred in a small Ohio town. A child died of diphtheria, and its mother packed its clothing away in a chest. The mother died fifteen years afterward. Recently the granddaughter opened and handled the contents of the chest, and was immediately taken ill with diphtheria, although there did not exist a single case of the disease in the village.—The Medical Age.

Blood Must Have Oxygen

The best way to introduce oxygen into the blood is to walk a mile uphill two or three times a day, keeping the mouth closed and expanding the nostrils. This beats all other methods. During such a walk every drop of blood in the body will make the circuit of the lungs, and stream, red and pure, back to its appointed work of cleansing and repairing worn-out tissues. All do not live in hilly sections, but art can devise means to apply the principle involved. The uphill walk, as a prophylactic and curative measure in many chronic ailments dependent upon a weak condition of the heart, lungs and blood-vessels, would prove invaluable.

Amputation of the Leg Under Hypnotism

A case of this character is reported from England with full details. The patient was a woman of thirty-eight who had previously been operated on, and proved a bad subject under chloroform, and so dreaded the anesthetic that she persuaded her medical attendant to employ hypnosis. Preliminary seances were held to test the patient and train her for the ordeal, and the operation was successfully accomplished without any complication. It has been said that at the time of the discovery of anesthesia some remarkable results in surgical practice were obtained by the use of hypnotism, but the new method drove the other almost out of memory.

Proper Nutrition Important

If all the maladies resulting from defective, excessive and badly regulated nutrition and neglected hygiene could be eliminated from the world, we should realize a pretty clean bill of health. Shot-guns, suicide and accidents would have to be invoked in order to keep up the business of the cemeteries, the crematories and the sexton. It is the ill-nourished and ill-fed who first succumb to any form of infection or epidemic. Your stall-fed ox is as sleek as satin. It is the whey-fed calf that shivers when the first early frost falls on the grass; that has to be housed and coddled, and that is a dwarf and a victim of vermin and scurvy. This is an important object-lesson, and it leads straight to a study of nutrition. The dominant question is a question of diet. In the ill-fed animal, human or dumb creature the blood-stream is the first to go bankrupt—the first to show deprivation and depression. It famishes for want of food.—Dietetic and Hygienic Gazette.

A Word from You

will get us one more subscriber to FARM AND FIRESIDE. It is only twenty-five cents a year—twice a month, twenty-four copies—about a cent a copy. Will you kindly speak to your neighbor about it for us? We will refund his money if he is dissatisfied with the paper. We want FARM AND FIRESIDE to be taken in a million homes.

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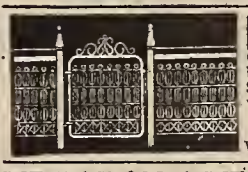

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The Haunted House

Not far from Lake Huron there is an old log house that has stood for over one hundred years closely hidden among the trees, partly of an orchard and partly wild-wood, that have grown up around it. I do not know why it is so, but among those trees no one ever hears the song of a bird or the chirp of the squirrel. What happened there to drive away the forest dwellers no one seems to know, and it is hard to get even the neighbors or the relatives of the former owners to say anything at all about the "haunted house," as it is called.

It has no other name. No one speaks of it as the dwelling of any particular person, although the household goods of two of its inhabitants still remain in the room used by them as bedroom and kitchen.

The house is haunted as surely as ever a house was, and in the darkness of the woods there roams the spirit of at least one of the women who occupied it. On winter nights her singing can be heard, and the hum of her spinning-wheel wakes the forest and frightens any one who ventures near the house. Lights are seen moving at early evening-time from the grave near the back of the house, out around the yard, as if some one were looking to see if there were intruders among the trees and shrubbery; and when satisfied that no one is there, they go into the house, and then the sound of spinning is heard. What is being spun? What do the dead need of the product of the spinning-wheel? Who will use the garments woven from this mysterious yarn? It is no use to ask the neighbors, for each of them has a wild theory of the doings at the old house, and none of them has ever dared to investigate. What is the history of the old house?

No one seems to know just when it was built, but it was there when men who are now over fifty were children. It must be that it is over a hundred years old, and was there when around it the woods were inhabited by the Indians. No one has built near it, and with the exception of two women, no one has occupied it in the time within man's memory. Why did those women occupy it, and who were they?

There is a mystery about the first one of these women. She came into the woods from somewhere never revealed by her. She was not over twenty-five, and had the appearance and manner of a girl used to the refinements of life. Why she wandered into the woods she did not tell, but she eagerly accepted the offered hand of a fisherman who was settled there on the sandy shores of Lake Huron, and she bore him numerous sons and daughters; but to none of them did she impart the knowledge of who she was, or endeavor to give them any part of the education she evidently had. With no sign of happiness on her face, but with no complaints, she did her work as it came to her, until old age came, and then her mind seemed to crave for a chance to be alone. At this time the house was already old, and it stood over a mile from any other house. She fitted it up in some way, and after her day's work was done at her own home, would go through the deep woods to it, and remain there over night. No one was ever known to be there with her, although sounds of strange character were often heard in the woods, and gradually a fear grew upon the people, so that no one ventured near the place after dark.

The woman's eyes, always strange, became wild and looked as if things invisible to those around were seen by her, and she talked often to unseen auditors of things that her family had never heard, and mentioned names that were strange to them.

One morning she did not appear, and when some of her children ventured over to the old house, they found her dead, with a smile on her face, as if on leaving the world where she had worked so hard she saw peace and comfort for her.

When she died the house was closed, and they buried her near the back door, leaving her to sleep where she had spent her nights during the latter part of her life. Out on the lake-shore life went on as usual. The sons and daughters married and settled in homes of their own, with the exception of one son, who for a good many years remained single. At last he found a wife, and soon it seemed as if the spirit of the dead woman was guiding the young one. In many ways they were so much alike that it seemed as if they must be related. Years went by, children came, and the son's wife grew old and worn with work as her mother-in-law had been. When her sixtieth birthday passed, a strange longing seemed to take hold of her to visit the old house in the woods, and at last, in spite of her husband and children, she took up her abode there as did the other woman. Soon her eyes had the look of the other woman, and she, too, seemed to be living in a world apart from her surroundings. People who had occasion to go near the house at night began to tell of strange music that was heard among the trees and coming from the house. It was claimed that two voices could be distinguished, and gradually the belief spread that the living and the dead were together at night in the old house. The spinning-wheel that had lain idle so long was again being used, although no one ever saw any of its productions. If it spun any yarn it was not visible, but the hum of its wheel could be distinctly heard on the night wind many a time after the second woman took possession of the house.

At last death came again and claimed the tenant, and they buried her in the yard beneath an apple-tree. Since that time no one has occupied the house, and from the second grave no indication of unrest has been seen, but from the grave of the first woman comes on the darkest nights the strange light that flits around among the trees and then disappears in the house, from which the hum of the spinning-wheel and singing are often heard. Who is doing the spinning or the singing no one knows, and no one has yet been found who would venture near the house on the nights when the lights are seen flitting about.—W. F. Atkinson, in the Detroit Free Press.

Curious Facts

Icebergs in the Arctic regions are neither so large nor so numerous as those seen in the Antarctic seas, but they are usually loftier and more beautiful, with spires and domes. When the sun shines on them they look like a fairy city.

Most of us are born with about the same mental capacity. The size of the brain does not differ very widely among men. In most men the brain, including the network of the nervous system, weighs between three and four pounds; and instance after instance is recorded of men of splendid mentality whose brains were under the average weight.

Mr. H. C. Robinson, who has spent two years in scientific investigation in the Malay peninsula, recently exhibited to the zoölogical section of the British association a specimen of a fish known as the "mud-hopper," which by means of strong fins under its body is able to move about on land for distances of at least twenty yards from its watery nests in the swamps.

Flat bills denote fly-catching birds—king-fishers, heron, etc. The meadow-lark, that is much on the ground, has strong, stout legs, and the oriole, which is more in the air, has slender legs. The stiffened tail is not confined to woodpeckers and chimney-swifts, but the bobolink, that clings to the long grass, has also stiffened tail-feathers to help support the bird upright.—American Cultivator.

Reward of Merit

A New Catarrh Cure Secures National Popularity in Less than One Year

Throughout a great nation of eighty million it is a desperate struggle to secure even a recognition for a new article, to say nothing of achieving popular favor; and yet within

one year Stuart's Catarrh Tablets, the new catarrh cure, has met with such success that to-day it can be found in every drug-store throughout the United States and Canada.

To be sure, a large amount of advertising was necessary in the first instance to bring the remedy to the attention of the public, but every one familiar with the subject knows that advertising alone never made any article permanently successful. It must have in addition absolute, undeniable merit, and this the new catarrh cure certainly possesses in a marked degree.

Physicians, who formerly depended upon inhalers, sprays and local washes or ointments, now use Stuart's Catarrh Tablets, because, as one of the most prominent stated, these tablets contain in pleasant, convenient form all the really efficient catarrh remedies, such as red gum, blood root and similar antiseptics.

They contain no cocaine nor opiate, and are given to little children with entire safety and benefit.

Dr. J. J. Reitiger, of Covington, Ky., says: "I suffered from catarrh in my head and throat every fall, with stoppage of the nose and irritation in the throat, affecting my voice, and often extending to the stomach, causing catarrh of the stomach. I bought a fifty-cent package of Stuart's Catarrh Tablets at my druggist's, carried them in my pocket, and used them faithfully, and the way in which they cleared my head and throat was certainly remarkable. I had no catarrh last winter and spring, and consider myself entirely free from any catarrhal trouble."

Mrs. Jerome Ellison, of Wheeling, W. Va., writes: "I suffered from catarrh nearly my whole life, and last winter my two children also suffered from catarrhal colds and sore throat so much they were out of school a large portion of the winter. My brother, who was cured of catarrhal deafness by using Stuart's Catarrh Tablets, urged me to try them so much that I did so, and am truly thankful for what they have done for myself and my children. I always keep a box of the tablets in the house, and at the first appearance of a cold or sore throat we nip it in the bud, and catarrh is no longer a household affliction with us."

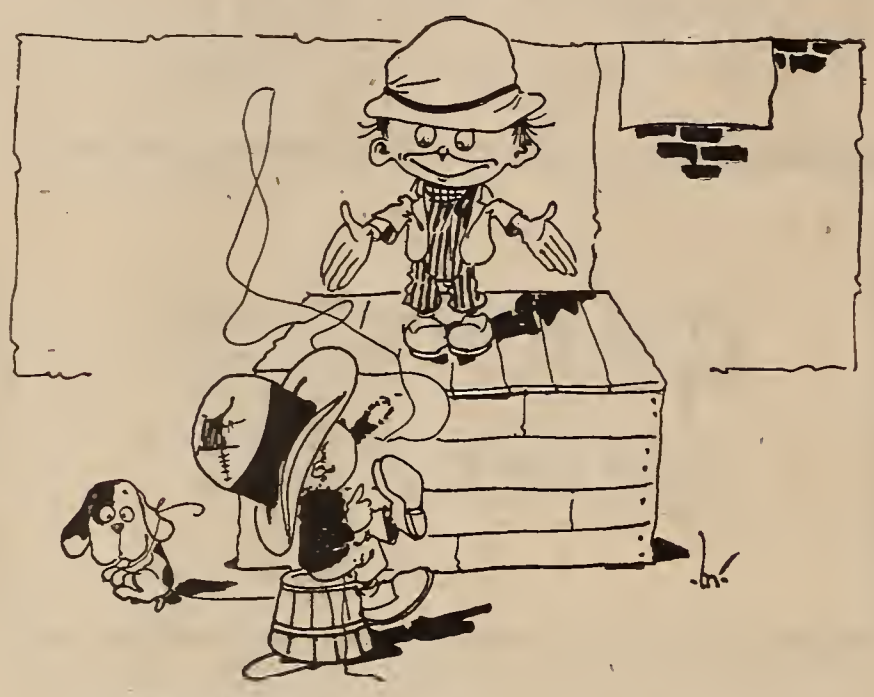
Full-sized packages of Stuart's Catarrh Tablets are sold for fifty cents at all druggists.

Send for book on cause and cure of catarrh—mailed free. Address F. A. Stuart Co., Marshall, Mich.

Wit and Humor

Cured

JUSTICE SHIRAS has a collar-button story which he tells with a great deal of gusto. A man living in Pittsburg had a wife who was complaining of dyspepsia, and she heard of a certain remedy that was put up in capsules. Her husband bought a dozen at a drug-store, and brought them home in a pill-box. At the same time he bought a dozen collar-buttons made of a metallic composition that looked very much like pearl, and the druggist gave him a pill-box similar to that in which the capsules were put up to carry them in. He took both boxes home, handed them to his wife, and the same day she began to take the medicine. After she had taken twelve doses she was entirely cured, and advertised the wonderful remedy all over the neighborhood. About this time her husband lost his collar-button, and opening his pill-box, found it empty. A brief investigation showed that the capsules in the other pill-box were still there, and that his wife had swallowed twelve composition collar-buttons, two a day for six days, and had been entirely cured of dyspepsia.—Record-Herald.



"Why did you give up yer job?"
"Oh, I guess I'm too sensitive; but when the boss kicked me out the window, an' told me not to come back, I got mad an' resigned."

Stuck to the Gravel

A story is told of a Kentucky mountaineer who had never seen a railroad-train. One day he consented to go to town and see the wonder. He arrived a little ahead of train-time, and getting impatient as he waited, he walked up the track to meet it. He met it as it rounded a curve. Turning about, the mountaineer ran along the track as for his life.

"Toot, toot," sounded the locomotive, slowing up; but the mountaineer only dug the gravel more industriously than ever. He soon reached the station, completely out of breath.

"Why didn't you cut across?" inquired one of the bystanders.

"Cut across!" exclaimed the uncouth lad. "If I had struck the plowed ground the thing certainly would have caught me."—New York Tribune.

Sam Jones to Reporters

A prominent Baltimore physician tells in the Baltimore "Sun" the following anecdote about Sam Jones, the Georgia evangelist:

"When several years ago Mr. Jones was at Emory Grove Camp, the newspaper reports of his sermons caused him to complain.

"At the last service, looking down at the reporters, who sat at a table just in front of the pulpit, he said, 'And I want to tell you fellows that I like you a lot, in spite of your manifold faults. You boys don't treat me right, though. You take my sermons and pick out a piece here, a piece there and a piece somewhere else; then you string the pieces together, and naturally they read funny.

"'Now, suppose I reported the Bible that way. A man asks me what the Bible tells him to do. I read in one place, "And Judas went out and hanged himself." I turn over, and read, "Go thou, and do likewise." And in another place I find, "And do it quickly."

"'Now, you see, boys, that sort of thing won't do; it ain't fair.'"

Love in Spectacles

He—"I suppose now I shall have to ask your father for his consent."

She—"No, Harry. After the first time you called, pa said I might have you if I wanted you. Pa and I have understood it for a long time."—Boston Transcript.

Tender—"A merchant arrested in Arizona for taking stock?"
Tough—"Yes; he was stealing horses."

When Man Wants But Little

Once upon a time there was a man who thought he wanted the earth. Then he had a vision, and he dreamed he did own the earth. He thought the assessor came around, and he woke up with a groan. He has never wanted the earth since.—Hudson Register.

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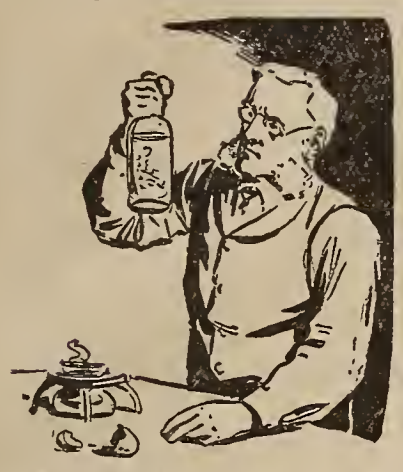

These remedies are combined in lozenge form, pleasant to take, and will preserve their good qualities indefinitely, whereas all liquid medicines rapidly lose whatever good qualities they may have had as soon as uncorked and exposed to the air.

This preparation is called Stuart's Dyspepsia Tablets, and it is claimed that one of these Tablets, or lozenges, will digest from 300 to 3,000 times its own weight of meat, eggs and other wholesome food. And this claim has been proven by actual experiments in the following manner: A hard-boiled egg cut into small pieces was placed in a bottle containing warm water heated to ninety-eight degrees (or blood-heat); one of these Tablets was then placed in the bottle, and the proper temperature maintained for three hours and a half, at the end of which time the *egg was as completely digested as it would have been in a healthy stomach.* This experiment was undertaken to demonstrate that what it would do in the bottle it *would also do in the stomach,* hence its unquestionable value in the cure of dyspepsia and weak digestion. Very few people are free from some form of indigestion, but scarcely two will have the same symptoms. Some will suffer most from distress after eating, bloating from gas in the stomach and bowels, others have acid dyspepsia or heartburn, others palpitation or headaches, sleeplessness, pains in chest and under shoulder-blades, extreme nervousness, as in nervous dyspepsia, but they all have the *same cause*—failure to *properly digest* what is eaten. The stomach *must have* rest and assistance, and Stuart's Dyspepsia Tablets give it *both,* by digesting the food for it, and in a short time it is restored to its normal action and vigor. At the same time, the Tablets are so harmless that a child can take them with benefit. This new preparation has already made many astonishing cures, as, for instance, the following:

"After using only one package of Stuart's Dyspepsia Tablets I have received such great and unexpected benefit that I wish to express my sincere gratitude. In fact, it has been six months since I took the package, and I have not had one particle of distress or difficulty since. And all this in the face of the fact that the best doctors I consulted told me my case was chronic dyspepsia, and absolutely incurable, as I *had suffered twenty-five years.* I distributed half a dozen packages among my friends here, who are very anxious to try this remedy." Mrs. Sarah A. Skeel, Lynnville, Jasper Co., Mo.

Stuart's Dyspepsia Tablets are sold by druggists everywhere at 50 cents for full-sized packages. A little book on "Stomach Diseases" mailed free by addressing F. A. Stuart Co., Marshall, Mich.

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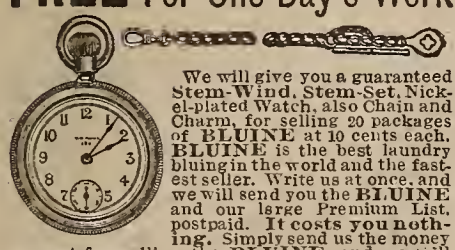

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Wit and Humor

Could Supply Them

In a Scotch church an old minister who was very deaf wished to introduce some new hymn-books into the church, and asked his precentor to give out the notice immediately after the sermon. The precentor, having a notice of his own, gave out that members of the congregation wishing to have their children baptized were to send their names into the vestry. The old minister, thinking that it was the notice about the hymn-books, stood up, and said, "And I wish to say, for the benefit of those who have not any, that they may be had in

A BIG DIFFERENCE

Maisie—"Did you convince her that she was wrong?"

Daisy—"No; but I made her admit it."

the vestry any afternoon, between the hours of three and four. Ordinary little ones at a shilling each, and special little ones, with red backs, at one and three."

A Monopoly

A woman once asked a little girl of five if she had any brothers.

"Yes," said the child. "I have three brothers."

"And how many sisters, my dear?" asked the woman.

"Just one sister, and I'm it," replied the little girl.—The Little Chronicle.

The Ordeal

"Well, Jones is certainly a patient man with a temper hard to ruffle."

"Patient is no name for him. Why, that man has been known to go out with

THE AERONAUT AND THE STARS

Said the aeronaut, in his balloon,
"I shall see all the stars very soon."
He was right, for he dropped,
And he saw, when he stopped,
Three millions of stars and a moon.

his wife to select wall-paper and go through the ordeal without losing his temper."—Baltimore Herald.

Good Enough

A certain parson of the old school, who had preached a sermon of the finest, old-fashioned flavor, after deploring the new-fangled doctrines of some of his younger brethren—especially the ideas of the heaven and other historic places which they inculcated in their discourses—wound up his own discourse by saying, "Brethren, the hell of our fathers is good enough for me."—Argonaut.

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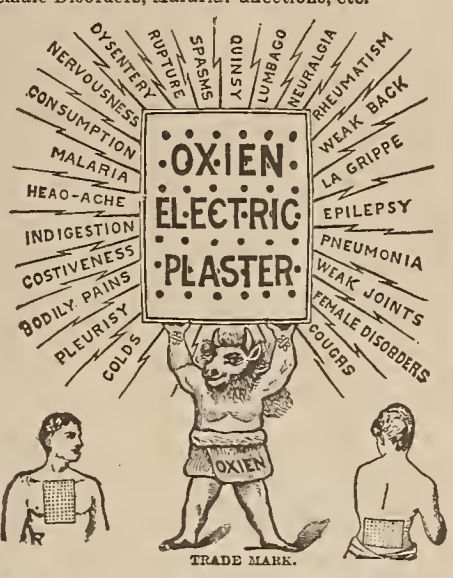
2. When used in connection with Oxien, the Wonderful Food for the Nerves, they promptly relieve and permanently cure Influenza, Nervous Prostration, Kidney, Liver, Heart, Lung, and Stomach troubles, Dyspepsia, Sick Headache, Anæmia, Female Disorders, Malarial affections, etc.



3. They act as an infallible safeguard against contagions and infections diseases, and nothing equals them as a chest protector for both children and adults.

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Although the price of Oxien Plasters is 25c. each, to the first seven hundred new friends who can prove they have never before used the Oxien Remedies, and will agree to test the powers of our Wonderful Discovery, and tell their friends if they find relief from their miseries, we will send a sample Oxien Electric Porous Plaster post free.

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Ardath, Corelli; Autocrat of the Breakfast Table, Holmes; Black Beauty, Sewell; Bracebridge Hall, Irving; Beyond Pardon, Clay; Cloister and the Hearth, Reade; The Deemster, Caine; The Egyptian Princess, Ebers; Elizabeth and Her German Garden; The First Violin, Fothergill; Gold Elsie, Marlitt; Hypatia, Kingsley; The James Boys; Last Days of Pompeii, Bulwer-Lytton; Last of the Mohicans, Cooper; The Light That Failed, Kipling, Micah Clarke, Doyle; A Maiden All Forlorn, Duchess; Not Like Other Girls, Carey; Old Mam'selle's Secret, Marlitt; Only a Governess, Carey; Plain Tales From the Hills, Kipling; Romance of Two Worlds, Corelli; The Second Wife, Marlitt; Shadow of a Crime, Caine; The Sketch Book, Irving; The Scarlet Letter, Hawthorne; The Song of Hiawatha, Longfellow; Thelma, Corelli; Stepping Heavenward, Mrs. Prentiss; Tales from Shakespeare, Lamb; Ten Nights in a Barroom, Arthur; Wormwood, Corelli; Vendetta, Corelli; Hidden Hand, Southworth; Robinson Crusoe, Defoe.

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The Little Brown Drum

The little brown drum, with its rallying roll,
And rattle and rumble that reach to the soul—
With rub-a-dub-dub,
Oh, rub-a-dub-dub!
Is echoing far o'er the stretches of snow;
Is wrathful and high and is vengeful and low;
But it calls and it calls in the town and the field
That the vials of war have at last been unsealed,
And the banners of war with a snap are unfurled,
While the song of the drum wakes the half of the world.
The little Brown Drum!
The little Brown Drum!

The little brown drum, with its rollicking beat,
Is sending the lilt of the march to the feet—
With rub-a-dub-dub,
Oh, rub-a-dub-dub!
The heart of the mother grows cold, and she prays
At seeing the eyes of her son all ablaze.
The drum chants of glory, and then when she hears
She blesses her son in the rain of her tears;
And lips that are silent and pallid and dumb
Break haltingly into the song of the drum.
The little Brown Drum!
The little Brown Drum!

The little brown drum! It is sounding its call
In palace and cottage and hovel and hall—
With rub-a-dub-dub,
Oh, rub-a-dub-dub!
It sweeps through the snow and it cries to the seas,
It voices its song in the wildest of keys;
And hands drop the glass where the wine has been poured,
While quivering fingers are clasped on the sword.
It shakes in a shower the bloom of the plum—
The terrible, terrible call of the drum.
The little Brown Drum!
The little Brown Drum!

The little brown drum! There's a laugh in the leap
Of its sonorous tones from the shrill to the deep—
With rub-a-dub-dub,
Oh, rub-a-dub-dub!
There's a sigh in its song when the measures are slow,
But it calls to one, "Come!" and it cries to one, "Go!"
And it rumbles at night and it rumbles at dawn,
Till over the land it goes volleying on,
Till the hands of the drummers are pulselessly numb,
Repeating and beating the call of the drum.
The little Brown Drum!
The little Brown Drum!

—W. D. N., in the Chicago Tribune.

Figures About Steel

IMPORTATIONS of iron and steel into the United States in the fiscal year 1903 were larger than in any year since 1891, and with that single exception were larger than at any time for twenty years. In only seven earlier years in the history of the country have the importations of iron and steel been as large as those of the fiscal year just ended. The total value of iron and steel imported in the fiscal year ended June 30, 1903, was $51,617,312, against $27,180,247 in 1902, $17,874,789 in 1901, and $12,100,440 in 1899. Running back through the import record from 1850 down to 1903, the only years in which the value of iron and steel imports exceeded those of 1903 are 1872, when the total was $55,540,188; 1873, $59,308,452; 1880, $53,714,008; 1881, $60,604,477; 1882, $67,976,897; 1883, $58,495,246, and 1891, $53,544,272. These large importations of iron and steel have occurred, it will be seen, in periods of exceptional business activity, but on no former occasion have such large importations been made in the face of so great home productions of iron and steel. In 1891, when the importations were two million dollars greater than in the year just ended, the total home production of pig-iron was only eight and one half million tons, while that of 1902 was over seventeen million tons, or double that of 1891. In the period from 1880 to 1883, when the importations of iron and steel were larger than those of 1903, pig-iron production averaged only about four million tons per annum, or less than one fourth the annual production of the present time; and in 1872 and 1873, when the importations slightly exceeded those of 1903, the pig-iron production averaged only two and one half million tons annually, against seventeen million at the present time.—Harper's Weekly.

Miscellany

German Commercial Enterprise

We came down from Rome to Naples, and there took the splendid, great steamer "Kiachaou" of the Hamburg-American line, which was crowded with passengers for India, China and other countries of the Far East, where the Germans have commenced an active commercial crusade. No nation is working so hard or so systematically to increase its exports. The emperor and his government and the parliament have joined with the commercial and industrial organizations, and are sending subsidized steamships to every port, carrying the products of the German manufactories. In every town of any importance from one end of the earth to the other you can find a German merchant; upon every steamer and every railway-train a German commercial traveler, and the government has provided the means for its manufacturers to reach their customers and deliver the goods.

This is particularly true in the Far East, where the Germans are pushing the English out of the trade. Twenty years ago Englishmen controlled everything. They had ten establishments to one of any other nationality. Now the Germans surpass them in numbers, in capital and in enterprise wherever you go—in South America, in China or in Africa. The German steamships to the East are winning patronage away from the old conservative English lines by sending frequent steamers with the best of accommodations and by their efforts to please. The English lines have been running on their reputations for years, but the Germans have compelled them to build new ships and modernize the service. Half the passengers on the German ships are Englishmen, who give good reasons why they prefer them to their own.

A few years ago a German steamer was seldom seen in the Suez Canal. Last year they were second in number among all the nations. The report of the company shows that 3,708 steamers passed through the canal in 1902, having a total tonnage of 11,248,413 tons. Of these 2,165 were English steamers of 6,772,911 tons, while 480 were German steamers of 1,707,322 tons. You will notice that the German steamers must have averaged very much larger than the English, because the tonnage is out of proportion to the numbers, and that illustrates the condition of the trade.—Excerpt from a letter by William E. Curtis to the Chicago Record-Herald, dated Cairo, Egypt, December 28, 1903.

The Honesty of Elinor

Elinor was carefully and patiently adding the last long column of figures for her morning lesson.

"Two and three and nine and five make nine and one to carry," she whispered to herself. Just as she put down the last figure, Miss Brown's brisk voice announced the end of the hour, and all the grimy and much-erased "number-papers" were made into a neat pile and put on the teacher's desk. As Elinor sat with hands folded in front of her, she was busy with very pleasant thoughts.

"I worked very carefully," said she to herself, "and probably I'll get a hundred per cent, and then I can go to the city with father." For at dinner yesterday father had said, "If any child gets a hundred in arithmetic to-morrow, I'll take him to town when I go on Saturday."

A trip to town with father was the greatest treat a little girl of six could possibly have, and, Elinor thought, quite worth a good number-paper. She ran all the way to school next morning to get her standing, and, oh, joy! Miss Brown smilingly gave back a paper with a big blue-penciled "100" at the top. A radiant little girl answered questions and did hard tasks cheerfully that morning, for was not the treasure hers? Near the end of school, however, something happened to disturb her joyful anticipations. When they were overlooking yesterday's papers in class, Johnny gave "54" for the answer of a certain example. Elinor looked at her paper for comparison, and found, to her horror, that hers was "53." Johnny was right, for teacher said so, and if Elinor were wrong, what should she do about her hundred per cent and the treat? "Ought I to tell?" she thought, anxiously.

Her decision was quickly made, and at the close of school a forlorn little body waited in her seat while all the long files passed slowly by, all gazing in wonder at poor Elinor. When the last footstep had gone down-stairs and out of doors, she went to Miss Brown and explained.

"Why, yes, Elinor," said her teacher, "to be sure! How careless I was to mark that right when it was really wrong! That makes your mark '90,' doesn't it?" and she took out her big blue pencil, and with it made the change that so disappointed all Elinor's hopes.

Elinor did not run home with a happy face that day; in fact, she couldn't help crying just a little. It was very hard when she had worked so, and thought she had won her prize! They were half through dinner when she got home, and as she stepped into the dining-room, father sang out, without noticing her tears. "Well, did you get a hundred, Elinor?"

That brought the tears afresh, and she sobbed out the whole story in mother's arms. When father knew, he said, "Why, come here, childie! Father's prouder of an honest little girl than of any number of 'hundreds.' You were a good child to tell Miss Brown," and he kissed her tenderly.

"I'm sure she understands," said father to mother that evening, "and I'm going to take her anyway. It was a fine thing for the little thing to do. I hardly thought it was in her."

On the next Saturday morning, in a train bound for Boston, sat a happy little girl who kept a close grasp of father's first finger, and smiled brightly at all the other passengers.

"Just think," she said to herself, "if I hadn't told, I'd have come just the same, but I'd have felt so mean! And now I'm going, and I was honest, too, and father is pleased. After now," says the wise little lady, "I'll always be honest and truthful, for it's the very best thing to be."—Elizabeth Crane Porter, in the Christian Intelligencer.

A Farmer-Author

Novel-readers, book-reviewers and literary critics have been asking each other, "Who is Philip Payne?" His recent novel of Chicago life and American politics, entitled "The Mills of Man," is being read and talked about in every large city in the country. Some reviewers have credited the book to Mr. Will Payne, the author of "On the Road to Fortune," and similar stories of Chicago business life. Others imagine it has been written by Mr. William Morton Paine, the author of "Little Leaders." We understand, however, that "The Mills of Man" was really written by Mr. Philip Payne, a Chicago newspaper man, who in this book makes his début as a writer of fiction. The story shows that Mr. Payne is intimately acquainted with the social and political life of the great city, and has the power to create characters that live and move and fix themselves in one's memory. The book is particularly strong in characterization, which is a genuine blessing in these days of fictional plots and counterplots. The reading-public will do well if it distinguishes between the literary work of Mr. Philip Payne, Mr. Will Payne and Mr. William Morton Paine, all of Chicago, and all writing of the life of the city.

Will Payne was born on a farm in Whiteside County, Illinois. The descent is purely from New England, running back in a traceable line to 16— something, and embracing several parsons. The grandfather, William Payne, went to Illinois in the 40's, a farmer. The father, William A. Payne, and three brothers served in the Civil War. Will Payne went to the public school at Morrison, Ill., until his fifteenth year, and then went to Harvard, Neb., where his uncle had a small bank, in which he learned to keep books and to do business with the farmers over the counter. There he was married in 1886. Four years later he went to Chicago, and after a brief clerking experience went to "The Daily News" as editorial and special writer in the fall of 1890. Later he was city editor, and then financial editor, until 1896. For a short time he was financial editor of the Chicago "Chronicle," but since the spring of 1897 he has been financial editor of "The Economist." Mr. Payne began to write about 1885, and during the next five years little stories and sketches found their way into daily and weekly newspapers published in Omaha and Denver. In 1896 he brought out "Jerry the Dreamer," followed two years later by "The Money Captain." "On Fortune's Road" is another of his books, and his latest novel, "Mr. Salt," has just been published by Houghton, Mifflin and Company. It is a vigorous story of American business life to-day, its scene laid mostly in Chicago.—The Interior.

In growing potatoes, a change of seed from North to South is a decided advantage. The crop is sure to be heavier and of more vigorous growth, consequently there is less liability to disease.

Interesting Facts

Forty thousand birds, mostly sandpipers, are reported to have been killed recently on the North Carolina coast for millinery purposes.

Although the sea covers three fourths of the earth's surface, it does not provide in the same proportion for man's wants. Only about three per cent of the people in the world gain their living directly from the sea.

They cut an old-time pine down in Sangerville, Maine, recently. The tree was one hundred and forty-seven feet tall, six feet through at the base, and ran up sixty feet before there was a limb. It will be used for a mast.

Maine's sea-coast in a straight line is two hundred and twenty-five miles, while following the ins and outs it is two thousand four hundred and eighty-six miles. Between Kittery Point and Quoddy Head there are fifty-four lighthouses.

Probably the oldest musician in the world is Manuel Garcia, now aged ninety-eight years. He has given up teaching, and lives in a villa in northwest London. His memory is still excellent, his wit sparkling, and he is proud of having recently learned how to play "bridge."

A Lewiston (Maine) woman sat up for her husband until one o'clock the other night, intending to discuss with him the sinfulness of his goings on. Finally she gave it up, and went up-stairs, only to find him in bed and fast asleep there for many hours. He hadn't been out at all.

Russian hens are progressive. They laid one billion two hundred and fifty million eggs for export last year. The eggs are sold in Russia at from six to ten cents a dozen. They are exported to Hungary, then sold to Germany as Hungarian eggs, and finally to England as German eggs.

Thirty years ago there were twenty-nine street-railroads in Massachusetts; to-day—or rather two years ago, for the 1901 report is the latest at hand—there were one hundred and nineteen companies. The number has increased since that time. The capital invested for the two periods contrasted was $7,203,539 and $99,611,185. In the earlier year they transported 43,557,636 passengers, in the latter 483,526,935. There was two hundred and four miles of rail in 1873, two thousand three hundred and nine in 1901.

Many animals possess more than two eyes which do not act together. A leech, for example, has ten eyes on the top of its head which do not work in concert, and a kind of marine worm has two eyes on the head and a row down each side of the body. Some lizards have an extra eye on the top of the head which does not act with the other two. A bee or wasp has two large compound eyes which possibly help each other, and are used for near vision, and also three little simple eyes on top of the head which are employed for seeing things a long way off.

A Connecticut firm manufactures sacred scarabei for the Egyptian-tourist trade. The little charms are carved and even chipped by machinery, colored in bulk to simulate age, and shipped in casks to the Moslem dealers at Cairo. The Arabian guides are the chief buyers, many of them being adepts at "salting" the sands at the base of the Pyramids, or about the sacred temples, where they artfully discover these scarabei before the very eyes of the Yankee tourist, and sell him for an American dollar an article manufactured at a cost of less than a cent in his native land.

The idea that the waves of light produce a mechanical push, or pressure, was advanced years ago by Clerk-Maxwell, but he could offer only a theoretical proof. Recently Professor Lebedew, of Moscow, has made an experimental demonstration of the "pressure of light." He employs a radiometer resembling the familiar Crookes radiometers with their revolving vanes, but uses a larger and more completely exhausted bulb, from which the heating effect that is the principal agent in moving the Crookes vanes is excluded. When the light falls upon the vanes they are driven before it, and the intensity of the pressure thus revealed comes within ten per cent of that calculated by Clerk-Maxwell. The effect is independent of the color of the light, and directly proportional to its energy.—American Cultivator.

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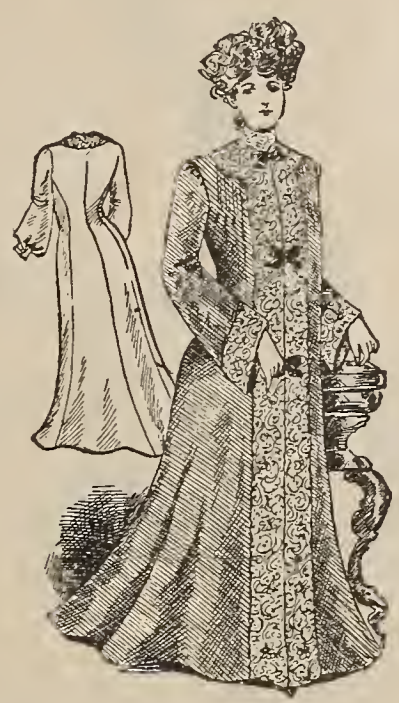
No. 4655.—Boys' Knickerbocker Suit. 10 cents. Sizes, 4, 6, 8 and 10 years.

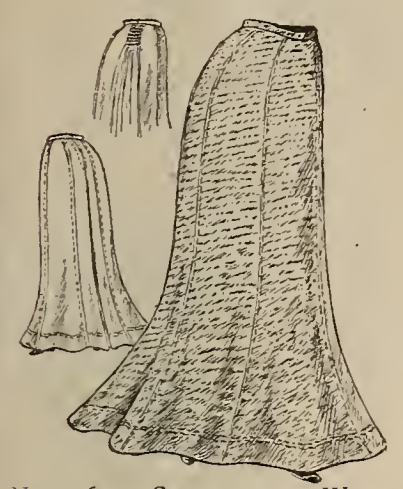
No. 2003.—Girls' Dress. 10 cents. Sizes, 6, 8, 10 and 12 years.



No. 2051.—Ladies' Home Gown. 11 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

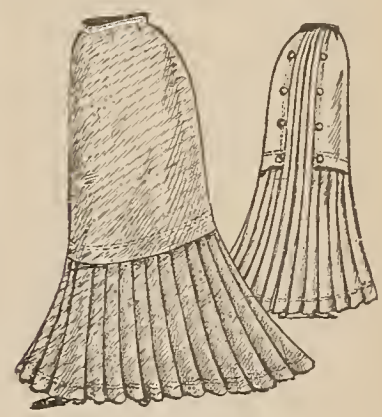
No. 2049.—Child's French Frock. 10 cents. Sizes, 2, 4, 6 and 8 years.

No. 2062.—Blouse or Shirt Waist. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.



No. 4657.—Seven-gored Walking-skirt. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.

No. 4638.—Misses' Box-plaited Skirt. 11 cents. Sizes, 12, 14 and 16 years.



No. 4648.—Walking-skirt. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.

No. 2052.—Stock Collars. 10 cents. One size.

No. 2054.—Misses' Kilt Plaited Skirt. 11 cents. Sizes, 12, 14 and 16 years.

No. 2001.—Ladies' Wrapper with Rolling or Sailor Collar. 11 cents. Sizes, 32, 34, 36, 38, 40 and 42 inches bust.

No. 2046.—Child's Apron. 10 cents. Sizes, 2, 4 and 6 years.

No. 4647.—Fancy Waist. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 2061.—Military Shirt-waist. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 4653.—Tucked Waist. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 2059.—Misses' Box-plaited Waist. 10 cents. Sizes, 12, 14 and 16 years.

No. 4654.—Sectional Tucked Skirt. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.

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Farm Notes

The farmer who farms the farm as it should be will take care to farm the mind during the winter season.

Experience has demonstrated that wherever good roads have been built and kept in good order the public invariably want them extended.

With the continued scarcity of labor, more land will be seeded down to pasture, more stock will be raised, and more study will be given to the vital problem of how to save labor.

We must now begin to grow the very best varieties of fruits, and market them in smaller packages and in the most attractive form. As a rule dishonest methods never pay. The practice of the golden rule by the producer is sure to be appreciated by the consumer.

A novel feature of the Antwerp, Germany, Zoölogical Park is the rearing of the beautiful wild varieties of swans, ducks, geese, pheasants and other so-called wild birds, which can be tamed and raised as domestic fowls quite as well as chickens and turkeys. We have in this country several species of birds that might be domesticated with both pleasure and profit to any one who cares to make the experiment. * * *

Catalogues Received

W. N. Scarff, New Carlisle, Ohio. Illustrated nursery catalogue.

Mark T. Thompson, Rio Vista, Va. Price-list of new strawberry-plants.

Griffith & Turner, Baltimore, Md. Catalogue of farm and garden supplies.

Archias' Seed Store, Sedalia, Mo. Garden, farm and poultry annual for 1904.

Nebraska Farmer Company, Omaha, Neb. "Nebraska's Resources Illustrated."

James B. Wild & Bros., Sarcoxie, Mo. Price-list of trees and small-fruit plants.

J. L. Loebs, Aberdeen, S. D. Descriptive catalogue of farm and garden seeds.

Lewis Roesch, Fredonia, N. Y. Illustrated nursery catalogue. Grape-vines a specialty.

Flansburgh & Peirson, Leslie, Mich. Catalogue of small-fruit plants and seed-potatoes.

The Conard & Jones Company, West Grove, Pa. New floral guide. Roses a specialty.

Elbert G. Packard, Dover, Del. Circular of field crops for forage and soil improvement.

Edward F. Dibble, Honeoye Falls, N. Y. Catalogue of farm seeds. Seed-potatoes a specialty.

Grover Nursery Company, Rochester, N. Y. General catalogue of fruit and ornamental trees.

James J. H. Gregory & Son, Marblehead, Mass. Illustrated catalogue of vegetable and flower seeds.

M. L. Bennett & Co., Westerville, Ohio. Illustrated catalogue of stump-pullers and tile-ditchers.

S. L. Allen & Co., Philadelphia, Pa. Illustrated catalogue of the Planet Jr. garden and farm implements.

Aspinwall Manufacturing Company, Jackson, Mich. Illustrated catalogue of the Aspinwall potato-machinery.

Electric Wheel Company, Quincy, Ill. Illustrated catalogue of Electric steel wheels and Electric handy wagons.

Peter Henderson & Co., New York, N. Y. "Everything for the Garden," listing seeds, plants, bulbs, tools, fertilizers, etc.

Ohio Carriage Manufacturing Company, Cincinnati, Ohio. Illustrated catalogue of Split Hickory vehicles and harness.

The Standard Harrow Company, Utica, N. Y. Illustrated catalogue of "The Standard Line" of harrows, cultivating-implements, etc.

Reliable Incubator and Brooder Company, Quincy, Ill. Illustrated catalogue of incubators, brooders and poultry-keepers' supplies.

The Storrs & Harrison Co., Painesville, Ohio. Illustrated nursery catalogue. Plants, trees, vines and seeds by mail a specialty.

Samson Carriage Manufacturing Company, Cincinnati, Ohio. Illustrated catalogue of Black Hickory vehicles and Oak Leather harness.

The Johnston Harvester Company, Batavia, N. Y. Illustrated catalogue of mowers, reapers, binders, rakes, tedders, corn-binders, drills, cultivators and disk-harrows.

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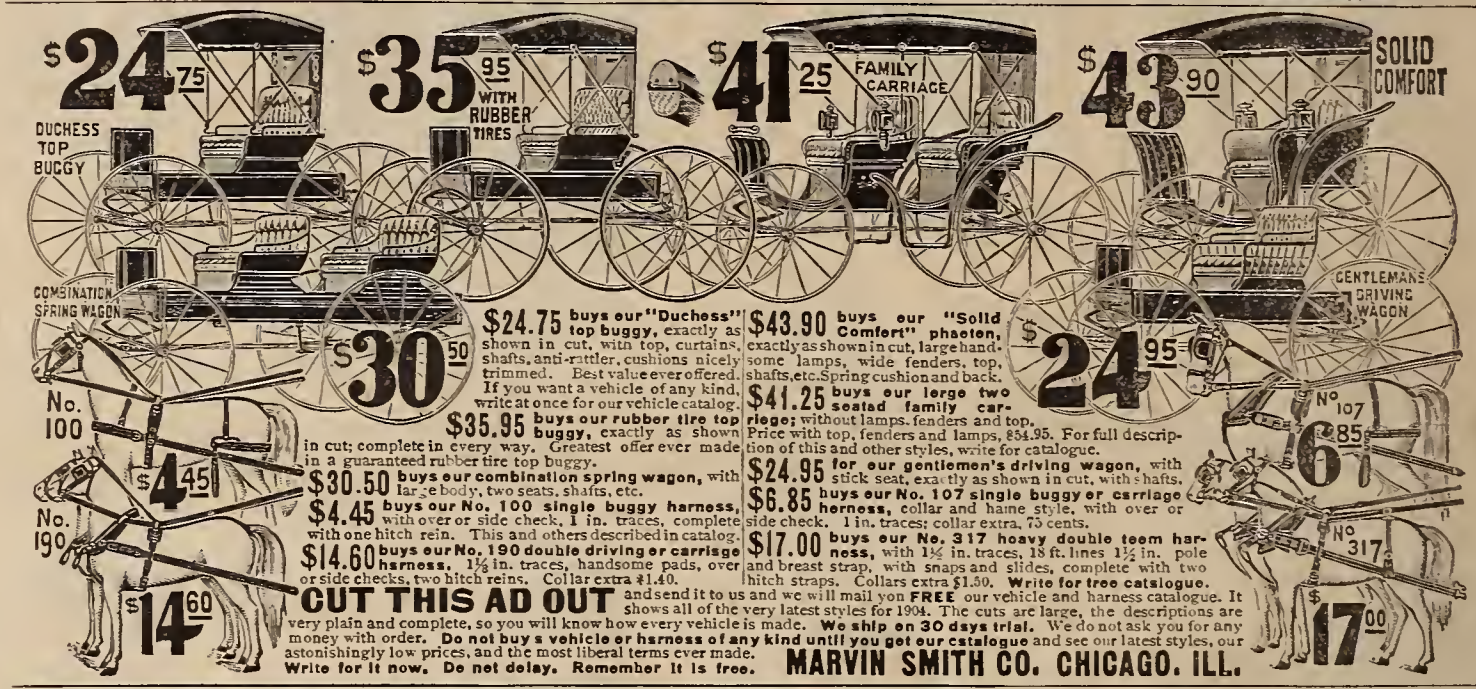

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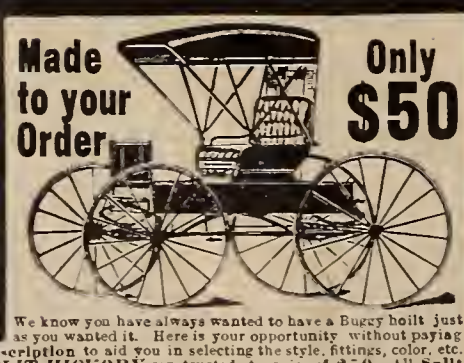

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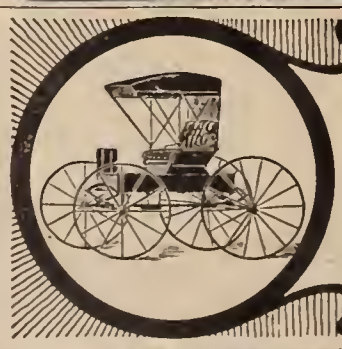

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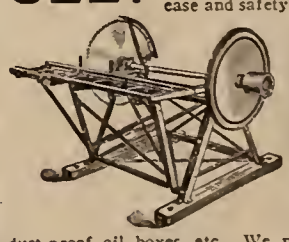

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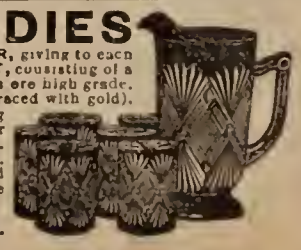

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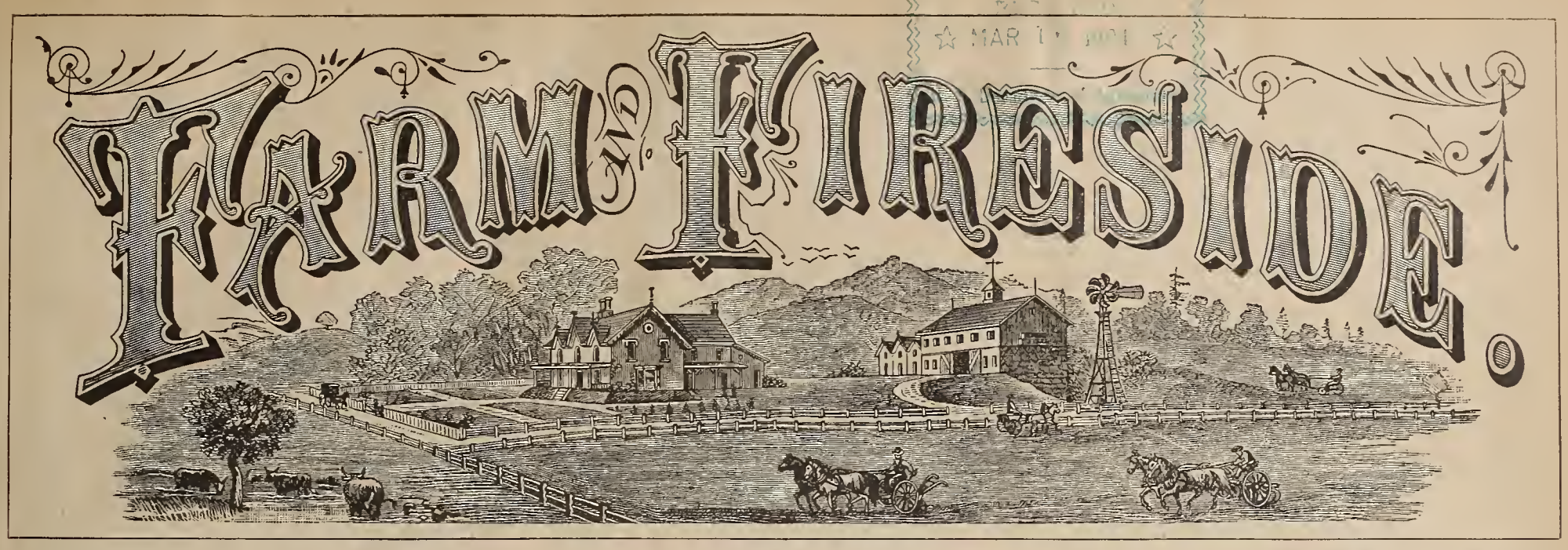

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Hard Earth Roads

By MRS. MARY E. LEE

ANNUALLY a great wail of protest and indignation over the fearful condition of mud roads, anathemas against the road system and supervisors, anxious inquiry as to the best means of securing a wiser use of the enormous but often profitless expenditure of money on roads, ascends to heaven. In only a few instances has there been individual effort, wisely directed, to ameliorate the conditions. It was left to D. Ward King, of Missouri, to inaugurate a system of caring for earth roads so that they might be traveled with comfort at any season of the year; yet so great was the adhesive quality of farmers to old traditions that for four years, even with a splendid object-lesson in view, not one of his neighbors followed suit. Then one began dragging, another and another, the movement gaining impetus and momentum, until to-day thousands of miles of earth road are being kept in good condition, the outgrowth of one man's persistent effort.

The Missouri State Board of Agriculture, hearing about the plan, sent an expert in the worst time of the year, and he reported, "It would be worth one hundred thousand dollars annually to the farmers of Missouri to make and maintain roads by this system." Mr. King has been sent all over the state explaining the process. Other states called for him, Ohio among the number, and so impressed were the farmers—the best the state contains—at the Ohio State Farmers' Institute that more than eighty have pledged themselves to go home and begin the work at once. In my own community, as soon as I told the plan, the exclamation was, "How simple! Why didn't I think of it before?" and several have pledged themselves to try the plan, and one has made his machinery—just one week from the time the idea was exploited.

"I feel a little hesitancy in showing you the model or telling you what has been done," said Mr. King, "for you will likely not believe me until you try. The entire secret is in keeping the road-bed smooth and hard, and with sufficient elevation in the middle, with sloping sides, to insure good drainage. To get this condition I use a common split-log drag." The drag is made of light wood, preferably of red, or "slippery," elm. Oak is too heavy draft for the team. The log should be about nine feet long and ten or twelve inches through. Face the split, or flat, sides, place them on edge, about thirty inches apart, and connect with three benches, as in a sled. It is better to shoe the front piece about two thirds of its length. The shoe may be made from an old wagon-tire. It should not project down more than one fourth of an inch. A chain or wire fastened twelve to eighteen inches from each end serves as a hitch. Make a light platform for the driver, but do not fasten it to the drag, as it is sometimes desirable to clean out rubbish under the platform.

Next in importance to the drag is the hitch. This should be so arranged that the earth is worked toward the center of the road.

After each rain or thaw go down one side of the road with this drag, and back the other. This is all that is necessary. If you will observe, you will see that as soon as a team goes on the road, it follows the path of other teams, and travel is all on one piece of road. By dragging, the moist earth is evenly distributed over the entire surface, and there is no inducement for teams to follow one track instead of another. Dragging gives a smooth surface, and the elevation of the center aids in drainage. Instead of the moist earth being churned into a puddle, a really water-tight mixture along a narrow track is pounded and cemented together over the entire surface. Dragging after each rain or thaw is really a preparation of a smooth, hard, elevated surface that will quickly shed the next rain. Some go so far as to drag before a rain, and this is a good plan if one will keep it up, as it gives a smooth surface, from which the water will quickly drain or be evaporated. But do not neglect to drag after every rain.

Mr. King said that fully ninety-nine and one half per cent of the roads of Missouri are of clay soil, and that it will be many years before even the main thoroughfares are piked or macadamized. He favors the building of hard roads as rapidly as public sentiment and finances permit, but in the meantime the hard earth road, kept hard and smooth by dragging, is the cheapest and most feasible means of maintaining roads in fit condition for travel the year round. The hard earth road is a connecting link between the old mud road and macadamized roads. Mr. King favors organized effort after people have become aroused to the possibilities of dragging. In the meantime one object-lesson is of as much value as a dozen sermons.

WITHIN ONE HUNDRED STEPS OF THE DRAGGED ROAD

"It takes but twenty minutes for me to drag the road between my house and my neighbor's, half a mile away. I do not have to go to town many times to make up the cost in time," said Mr. King. He insisted upon the value of individual effort. When asked if the road-planer would not do the work, he replied that it would, but the objections were that it cannot be at all places in the road-district at once, that it takes several teams and men and a supervisor to operate it, and consequently the chances are that the road will not be dragged. Whereas, if each farmer makes it his business to keep a short stretch of road in condition, he will be sure the work is done.

The accompanying illustrations show the difference between dragged and undragged road. The places are on the same kind of soil, the photographs being taken on the same day one hundred yards apart. They tell their own tale. A butcher got stuck in the mud, and had to be pried out, but when he came to the dragged road he went along at a sweeping trot. The same energy that would barely move a load in the mud made the team trot on the hard road.

Hon. Alexander Maitland said, "I heard D. Ward King in January. I went home, and made a drag. My road is a sticky yellow clay, and I dragged it only three times, but the rural-route mail-carrier says it is one hundred per cent better than other roads. I have traveled the gumbo road to Bigelow very often in the past five years, and never saw it so good as since they began to drag it. I go there to speed my horses. It is as smooth as a race-track. I have many times driven over this two miles at a three-minute clip." There are hundreds of similar testimonials from those who have seen and used the dragged road. One postmaster reported one hundred and fifty miles of road dragged within one week after a farmers' institute where this matter was discussed.

The address of Mr. King elicited warm discussion in the meeting, street-cars, hotels, wherever two or three were gathered together.

"It is entirely practicable," said Professor Thorne, director of Ohio Experiment Station. "The theory is correct."

"More than one half of Ohio could have good roads by this method," said Dr. W. I. Chamberlain in an animated discussion. "The non-glaciated half could secure them with little expense. It would be more difficult in the glaciated, limestone sections, but even there the roads could be greatly bettered."

There is no doubt in my mind but that any of our clay roads could be vastly improved. The experiment is simple, cheap and easily made, and no one can find excuse for neglect. The bulk of the work will come at a time when the teams could not be taken on the field, so that but very little time would be lost.

DRAGGED EARTH ROAD

Current Notes

It is estimated that Georgia has sixteen million peach-trees in orchards. Half a bushel to the tree would load sixteen thousand cars, and must mainly be disposed of between July 15th and August 15th. So many of these trees are of the Elberta variety, which must be marketed in so short a period of time, that disaster is imminent to the peach-growing industry.

Russia has recently set apart a fund of seventy-two thousand dollars for the improvement and expansion of the butter-making industry in western Siberia. Butter-making societies are to be organized under the supervision of butter-making experts and competent instructors. Siberia's production of butter in 1902 was one hundred million pounds, London, England, being one of the largest customers. * * *

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Mr. Greiner Says:

AT THIS WRITING the outlook for the bee-keeper in the Northern states is dark. The bees have had no chance to have a fly since fall (October or November), and the fear gains ground that most of them will winter-kill.

SULPHUR-LIME WASH FOR SCALE.—Professor Stuart recommends the proportions of thirty-three pounds of lime, seventeen pounds of sulphur and three to four pounds of caustic soda to one barrel of water, made without boiling, and the Vermorel nozzles as the best with which to spray the mixture on.

SEDIMENT-SEPARATOR.—A really meritorious device has been put on the market for separating, or "trapping," the gritty sediment in Bordeaux mixtures, lime and sulphur washes, etc., from the liquid portions, so that all clogging of nozzles is avoided. It is constructed on the same simple principle as the traps we have in our sink-drains in the cellar, etc. I shall adjust one to my barrel-sprayer at once, for no matter how good the lime that we use may be, there is invariably some sediment in the mixture, and at times it gives quite a good deal of trouble.

CLOVER-SICKNESS.—Clover is one of the plants which are very sensitive to acidity in the soil. Professor Thorne of the Ohio station noticed that clover failed to grow on some soils that had received annual applications of acid phosphate for a series of years. Sometimes he found spots or pockets in the fields where clover absolutely refused to grow. Close examination revealed the fact that the "clover-sick" soil, whether in whole fields or in these pockets, gave a decided acid reaction. When the sourness of the soil was removed by means of the application of lime, clover grew on it equally as well as before.

THE UP-TO-DATE FARMER uses intelligent, and at least reasonably correct, language. To this extent the criticisms of a Kansas reader directed against the slangy or obsolete expressions put in "Hank Peters'" mouth are not without good reason. Come to the meetings of our farmers' clubs in this state, or in any other so far as I am aware, and you will find the language used in their discussions and conversations at least equal, and in most cases far superior, to that indulged in by the average speaker before boards of supervisors or in many "common council" halls. The modern farmer is fairly well educated.

FOREST-PLANTING.—The ruthless destruction of our forests which has been going on these many years brings us face to face with the great problem of forest-planting, and if we don't look out we will soon be without wood for our houses and needed structures. It is reported that the Pennsylvania Railroad has just been planting fifty thousand locust-trees, to be used in the future for ties. The tract planted comprises about one hundred acres. The company intends to put out two thousand acres more in locust-trees at an early date. The locust has the advantage of being both a rapid grower and a firm and serviceable timber. Its wood is sufficiently hard and firm to hold securely the spikes driven into it, while it resists decay in the alternately wet and dry weather and exposed situations better than most kinds of wood. This, it seems to me, might serve as a hint to many owners of hill-lands of little money value, but good enough for planting timber-trees. A number of acres thus planted and left for some years, even without much attention in the way of cultivation, would give big returns for the original investment, possibly support the farmer in his old age, and be of more service to widow or children, and a more valuable inheritance, than a life-insurance policy. But there are a number of other trees that can be planted with expectations of profit—catalpa, poplar, pine, black walnut, etc.

IF ALL THE APPLE-TREES and all the pear and plum and peach trees in the United States, or at least the bulk of them, should once bear full crops, or anything approaching full crops, we would have fruits to burn, and apples and pears would be worth little more than hog-feed. Such a thing, however, is not likely to happen. We have our seasons of superabundance, and corresponding cheapness, of fruits; but apples, pears, plums and peaches of good quality and properly marketed have seldom failed to give good returns to the grower in the right location, and we need not fear that they will often do so in the near future.

DUST SPRAYING, which now seems to come to the front, has proved just as sure death to leaf-eaters on trees as it always has on potato-vines to the potato-bug. Whether it does as well for fungous diseases as spraying with the liquid Bordeaux mixture is as yet an unsolved problem, although in some trials seven dust sprayings appeared to give about the same results as two liquid sprayings, which cost fully as much in labor and material. For leaf-eaters, such as canker-worm, the proportions applied were one pound of Paris green to fifteen pounds of flour. The one objection which I always have had against using dust sprays on potatoes—namely, that we are liable to inhale a portion of the poisonous dust—seems to apply with even greater force to dust-spraying trees. In the operation we fill the atmosphere around the tree with the poisoned dust, and as we have to work in close proximity, we can't help getting some of it into our systems. I prefer liquid spraying, and would even if it was more expensive or laborious.

AMERICAN VERSUS FOREIGN PRODUCTS.—There may be some things for which it will be convenient, if not necessary, to go to foreign countries, such as bananas and other tropical fruits, particular delicacies which the peculiar customs, training and tastes of our mixed population or foreign-born citizens may require, but in the lines of ordinary necessities of life our own country furnishes such vast variety, such immense quantity and such high quality of products that the importation of many others, often greatly inferior to our own, seems entirely uncalled for. My friend H. E. Van Deman, formerly United States pomologist, whose sayings are usually full of good sense, has never been more correct than when he recommends the use of seeded raisins from California in place of the dirty little things called "English" currants. The latter are the small grapes grown in Greece, the clusters of which, never handled very cleanly, are, in the process of curing, placed on the bare ground to dry. The product is known in Europe and the markets generally as "Corinths," from the Grecian city of that name. Our women think they must put these nasty, flavorless "currants" into their fruit-cakes, when our own California Sultanas and seeded raisins are far better in quality, in cleanliness and in flavor for all the purposes that the imported trash is being used for, and just, or nearly, as cheap. Let us stick to our own home products, which are the best in the world.

MISLEADING PICTURES AND STATEMENTS.—Occasionally we find in the agricultural papers pictures which are calculated to show the difference in yield of certain crops grown with and without fertilizers. Before me is a picture which I saw in several Eastern weeklies in the last few weeks, and which represents a hill of potatoes grown with, and another hill without, potash, and also the corresponding yields, showing results obtained at one of our experiment stations. The potato-grower who takes such pictures and statements as a supposedly reliable guide is liable to be sorely disappointed. Under some circumstances and on some soils I have had remarkable results from the use of fertilizers, most striking in the case of so-called high-grade complete manures. At one time I could figure out an increase of one bushel for every eleven cents' worth of such fertilizer, the latter being applied at the rate of eight hundred pounds to the acre. At other times, however, the results were not so striking, and often entirely disappointing. Under some circumstances the application of potash—in the form of wood-ashes, for instance—will increase the yield materially; under others it will have almost no effect. And so it is with nitrates and superphosphates. Where the soil is deficient in potash, it is plain that big potato-yields cannot be expected until the deficiency is supplied. But most of the soils usually selected for potatoes, and properly handled by a good farmer, contain a sufficient amount of plant-foods to bring a good crop of potatoes. The mere dumping of plant-foods upon the potato-field will by no means insure a big yield, or even a large increase over the field not manured. Of all our ordinary farm crops, the potato seems to me just the one which supports the contention of the Bureau of Soils (in Bulletin 22) that soil-physics play a more important part in determining the yield than does soil-chemistry. It is the preparation of the soil, its texture, the moisture, the climate, or "season," which makes the big potato crops, more than the mere addition of a few pounds of potash or other plant-foods. And yet the addition of plant-foods from time to time, or even regularly, is useful and necessary to any soil, not only to keep up the supply, but also on account of their great influence on matters relating to soil-physics. Right here we can grow big crops of clover with at most small applications of superphosphate, or possibly of lime, and under proper management the clover will put the soil in just that mechanical condition which in a fairly favorable season will bring the big potato crop. It does this without extra doses of potash. In an unfavorable season it will not so surely give a maximum yield, no matter how much potash or other plant-foods you may put on.

Mr. Grundy Says:

CHANGING LOCATION AND VOCATION.—A young man who says he lives not far from Lexington, Ky., says he cannot understand why so many writers "argue against young men going to the city to earn a living." As a farm-hand he says he is paid sixteen dollars a month and boarded. He is obliged to get to work at half-past three in summer, and work until sundown, except forty-five minutes at noon. He thinks there are better chances for young men on the railway and street-car lines.

Well, if I were a young man, and lived in a locality where such conditions as he describes prevailed, I should lose no time in getting out of it. It may be that such conditions prevail only in the family of which he is a member. If such is the case, the sooner he leaves it the better it will be for him. When I was a farm-hand I once got into just such a family, and unfortunately for myself I had been misled into signing a steel-bound contract that compelled me to stay there four months. If ever a growing boy was "put through," I was. We never got to bed before ten o'clock, and were roused promptly at three. I think there is not a member of that family living to-day, and all died with poverty a close neighbor. I know of no conditions likely to exist on a farm that call for such long days, except just a few times in a decade.

I have long contended that the principal reason why the boys leave the farm is because they are virtually driven off. If a farm does not yield a good living, and something more, to the family tilling it unless each member makes a slave and a beast of burden of himself, there is something wrong with the management, and the chief should not lose a moment in beginning a thorough investigation of his methods to learn wherein they are lame and why he is compelled to work so hard. One day last summer I met a farmer friend on the road, and after chatting pleasantly a few minutes, he began cursing his luck and wishing all manner of evil to the country generally. He had a lot of hogs ready for market nearly a month, and the price was off, and seemed to be going worse all the time, while they were eating their heads off.

"Now," said he, "there's old S——, he hits the market right nearly every time. Don't think he has missed it once the past six years, while I have missed it more than half the time. He's the best guesser when it comes to selling that I know of. He let his hogs go just before the price went off, but as they had been coming up some for several weeks I felt safe in holding on. I was intending to let go just as soon as they reached what I thought would be the top, but they went off all at once, and I've got my hogs yet. Old S—— guessed it on his corn last year, and on his hogs the year before. He's the luckiest dog I know of about that!"

I said, "If you're so unlucky at guessing, and S—— is so lucky, why don't you let him guess for you, too? Watch him, and sell when he sells."

"Well, by grab," he exclaimed, "I never thought of that! That is just what I'll do!"

Late in the fall I saw S—— hauling a load of hogs, and thirty minutes later here came the other man with a load. In less than a week hogs were off nearly two cents. A few days later I met him in town, and he was wearing a smile that reached from ear to ear.

In almost every community will be found one or two farmers who seem to hit everything connected with planting, growing and harvesting crops just about right, while lots of others manage to make from half to a whole fizzle every time. Either one thing or another goes wrong, and the season is lost. They faithfully promise themselves that they will not get caught that way again, but the next season is so different that they are again bewildered, and again go wrong on something else, while the "lucky" fellow comes out as usual with colors flying. Wouldn't it be a good idea for the "unlucky" fellows to watch the "lucky" one, and do about as he does? But very few are likely to adopt this suggestion, because there are very few who will admit that they don't know just as much about farming as any other man on earth.

Whether it would be better for our young Kentucky friend to go to the city, or to some other section of the country where better conditions prevail and stick to the farm, is a question worthy of his best thought. Probably he can obtain higher wages in the city, but he will also have to spend more. He will have to pay, and pay well, for everything that is done for him. Board, washing and mending come high in the city, and forty dollars a month is small wages when all these heavy expenses must come out of it. There are expenses connected with living in the city that the country boy knows little about. Aside from the necessary expenses, the temptations to spend one's surplus are so numerous that one must almost become a recluse after his day's work is ended to keep a cent of it. A very few of the boys who go to the city save up a little of their earnings, but I know of none who have saved as much as they could if they had remained on the farm. If I were in our Kentucky friend's place, I would go to Kansas, Iowa or northern Missouri, and hire to a live farmer for the crop season or for a year. I think he will have little trouble in securing good wages and a good home in either of those sections, and if he proves to be a good hand he will never lack for work at good wages. And on the farm his outside expenses will be comparatively light, and he can save up most of his wages. This is a quiet sort of life I am advising him to follow, entirely free from the bustling excitement and rush of railroading, but if one follows it and watches his chances he will be very likely to save more money and to live longer to enjoy it.

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All Over the Farm

Farm Theory and Practice

THE RIGHT USE OF THE PLOW.—The right time and the right way of using the breaking-plow have a great deal to do with successful farming. While careless, slighting work is responsible for some crop-failure, a very considerable per cent results from the wrong use of the plow on the part of men who are willing to do a thoroughly good job. I am sure that we do not always get hold of the underlying principles, and fail to see just what should be the purpose of the plowing. We turn the soil over from habit before we plant, not regarding anything except that the land is being "broken" in a thorough manner for a crop. Necessary as plowing is, it usually does harm as well as good, and our business is to counteract the harmful part of the operation as well as we are able. If we stop to consider the unfavorable effects of this work, we are led to see when and how we should use the plow in the case of any particular soil.

HARMFUL EFFECTS OF PLOWING.—While we may know that a field must be plowed to loosen the soil, to destroy a sod and to admit air, yet we know that the plowing will do several things we should prefer to have different. For instance: (1) The plowing makes much land too loose for a time, and we need to harrow and roll or to have rainfall to firm it sufficiently to permit the water in the subsoil to rise into it and to exclude an excess of air. (2) We know the value of organic material near the surface to keep a heavy soil mellow. In land that is not rich in vegetable matter the soil at the bottom of the furrow is not the best soil to have at the surface, especially if small grain, grass or clover is to be seeded; and yet this is the soil brought to the surface to a great extent by the plow. (3) Nothing robs land of moisture like a breaking-plow. The five, six or eight inches of surface-soil is turned up and broken up in the air, and water that may be needed badly is carried off rapidly.

It is only when we keep in mind these and other effects that may be harmful in the necessary work of plowing that we can do the work in the very best way. It is our business to overcome these harmful effects just as completely as we are able.

THE TIME OF PLOWING.—We do well, in the case of most soils, to believe that the moisture in the soil is a big consideration. We want land that will hold moisture well, and that means that the physical condition should be as good as we can make it. If the soil is a stiff clay, and if the sod is heavy, frost is our best pulverizer. For this reason fall or winter plowing may be advisable. It lets the frost break up the compact portions into tiny particles, making the soil sufficiently mellow to retain moisture well—to make it lively and in good heart. When fall plowing gives this result by reason of the exposure to full frost-action, it is good practice. Affecting the moisture-holding capacity favorably, it becomes the right thing to do. On the other hand, land may be in better physical condition when plowed in the spring. This is true of most light land outside of the semi-arid region. More than this, the covering of sod during the winter preserves fertility wherever winters are open, and the guarding of fertility is always a big consideration.

Assuming that spring plowing is right for a particular field, we do well to remember that such plowing lets much water escape, and leaves the soil too loose to hold moisture. Settling must take place. Nothing causes plowed land to have a desirable firmness as do good rains. For this reason early spring plowing lets land get into better condition to withstand summer drought than does late plowing. Of course, this is true only when the soil is dry enough to be stirred. If the early plowing is done when the land is too wet, more harm than good is done.

It does not follow from all this that early spring plowing is always best. While it gives a chance for firming by rains, so that drought is withstood, there may be other considerations to outweigh its advantages. It may be almost necessary to plant on a fresh-turned sod, to get ahead of some bad weed or grass; or it may be that the land is low and wet naturally, and the effort is not to hold moisture, but to let it escape, and the looser the seed-bed, the better it is. Having hold of the principles that underlie, we adapt our methods to the particular soil with which we must deal.

DEPTH OF PLOWING.—We may make the general rule that the proper depth of plowing land is proportionate to the percentage of humus in the soil. We may deepen a soil as we add humus to it. All the soil needs organic material in it, and it is a mistake to bring up a lot of subsoil for which we have no supply of vegetable matter to put it into good condition. If we are dealing with a soil full of humus, the plow may go deep. But like all rules, there are exceptions. If the plowing is shortly before seeding-time, and if the crop to be grown needs a firm soil, it is usually best to plow shallow, so that harrow and drag may fine and firm as deep as plowed. This may not be so good for the soil, but it is essential to success with the crop we wish to grow. Generally speaking, fall plowing for a spring crop may be made deeper than spring plowing.

MANNER OF PLOWING.—If it were not for the difficulty of giving clean culture, it would be better to have the furrow-slices of sod-land left so perfectly on edge that the organic matter would be perfectly distributed throughout the soil, or, better yet, left heaviest near the surface. It is needed near the surface, where the best physical condition is wanted for retention of moisture. But a grass sod thus plowed would give a grassy seed-bed, and the next best thing may be to use a jointer, running it very shallow, and then leaving the furrow-slices on edge. When a soil is naturally deficient in humus, we bury just as much of the sod as we must, and no more. The plow should run evenly on the bottom, and it should cut nearly all it turns. If set so that the plowman must hold slightly against the furrow, the mold-board will crush the soil better.

SUBSTITUTES FOR PLOWING.—When preparing land for seeding to grass or clover, it is often best to plan not to have a plowing necessary. As we know, the plow makes the soil loose, robs it of moisture, and brings material to the surface that is not as friendly to the tiny roots of young grass and clover as is the surface-soil that has been exposed to the air and sun and had its organic material rotted. The disk or some other harrow would often fit land for seeding better than the breaking-plow. It leaves the soil solid except at the surface, moisture is held, and the surface can be made fine and compact. Many a failure to get a sod is due to an effort to do honest work with a plow when no plowing should be done. When, where and how to plow are questions to be answered by the individual farmer who grasps the principles that underlie, and studies all the effects of tillage. DAVID.

Some Ohio Questions—Crimson Clover, Etc.

W., Granville, Ohio, writes me as follows: "Recently I was obliged to dismiss an unworthy tenant from a two-hundred-and-twenty-five-acre farm. He had no system in management whatever, and was also dishonest. Both are common faults with tenant-farmers in this section. Incidentally, he left no meadow at all. One field of twenty acres, which is tile-drained and fairly fertile, was in corn. Would it profit me to sow crimson clover this spring? I want to get fertilizer for another corn crop in 1905. If you advise crimson clover, what is the best time for sowing? I am not much inclined to try it in corn for this field, though I plan to do this with another field. Could I cut a crop of clover this year? What amount do you advise sowing? Would it be safe to try it with oats? Do you favor it rather than common red clover? Location, exact center of Ohio.

"Here's another problem: Last year I tried Canada peas and oats together. I followed some one's advice, and plowed the peas under to a depth of six inches, drilling oats after them. I got good oats for hay, but scarcely one pea-vine to a square yard. The peas are a failure. How do you manage this combination?

"Another, and this of interest to most farmers in our section just now: A thaw, followed by a devastating rain (it came down in floods), has seamed wheat and grass fields (fall sown) to a sad extent. How would you advise us to repair such damage? Some fields (hillside) have more gullies than an army mule has ribs. How can we get a stand of grass (or what) and avoid a repetition of such loss?"

I believe crimson clover is sometimes sown successfully further north in the spring, but in central Ohio the time for sowing it is July or August. It should then make a fair growth before winter, keep the ground covered during the winter, start early in the spring, and be in full bloom the last of May. It is not generally regarded as a hay crop, although I have made good hay from it. As a fall, winter and spring soil-protection it is good. I have never had any trouble growing it, but I meet many people who say they have had. I usually sow in corn at the last working—twelve to fifteen pounds of Delaware seed to the acre, well harrowed in. It should not be sown with oats, although it may with buckwheat. I have sown it thus in July, harvested a good crop of Japanese buckwheat before frost, and had the clover to plow under the next spring. I do not like it as well as the common red clover.

My advice would have been to sow Canada peas and oats for a soiling or hay crop, and follow with crimson clover or rye as a winter crop to plow down the next spring for corn; but as your experience with peas and oats was not satisfactory, I hesitate to recommend that crop. I may say, however, that the advice to plow the peas down six inches was not good. I have plowed them in four inches with indifferent results. I plant now by having my ground well prepared, and drill in with a grain-drill one and one half to two bushels to the acre, with the drill-teeth weighted so they will go well down. Then drill the same quantity of oats crosswise, if the lay of the land will permit, with the drill-teeth running shallow. This has generally given me a good crop, but sometimes the peas mildew and are unsatisfactory.

Oats, three bushels to the acre, may be sown for hay or to let ripen, and the ground then disked and sown to crimson clover or rye, and plowed down the next spring; but if the spring should be dry, let the plowing be done early, as both these crops are hard drinkers of soil-moisture when they make their rapid spring growth.

If you want hay, I would advise sowing part in oats and peas and the balance in oats. Cut both these for hay when the grain of the oats is in milk, disk the ground immediately, and drill in about one or one and one half bushels of cow-peas to the acre. Cut these for hay before frost, disk the land again, and sow to rye to cover ground during winter and to plow down for corn. If this is too much work, or if securing the hay is not an object, and enriching the land for the corn crop of 1905 is, plant cow-peas in June, turn in a lot of hogs in the fall, and let them graze on the peas. The vines will mulch the ground and be good to plow down for corn, and should bring a good crop.

Your last question is difficult to answer. There is little to do while the ground is frozen except to dam the larger gullies with clover-seed straw, cedar-tops, corn stover, or anything that will check the flow and gather drift. When the ground thaws, small dams may be made with a shovel, or a plow drawing furrows, to check the headway of gathered water and divert it into ways of slower flowing. Well-drained land full of humus is the best protection against washing, but when a few inches of the surface thaws, and the rains come "in floods," we have to grin and bear it. Furrows drawn across the hills of washy fields in the fall is a good preventive of winter and spring washing. If gullied beyond hope, I would not sow clover on the wheat this spring, but wait until the wheat is harvested, and then plow and make fine, and sow eight quarts each of timothy and clover in August if not too dry; if too dry, wait for rain. If you do this, and will manure it lightly during fall and winter, you will raise hay. W. F. MCSPARRAN.

What Has Become of the Oxen?

This may seem like a singular question to ask in these days, when the steam-engine, the bicycle and the automobile are whirling men across the country in every direction, like so many great shuttles carrying threads in the warp and woof of society; but really it is a thing that concerns the farmer of the United States more than a little.

I am by no means an old man, having only recently passed the half-century mark, but I well remember that when I was a lad of twelve to fifteen few farmers of the section in which I then lived had anything but an ox team. There was then just as much pride among farmers to see who should have the nicest yoke of oxen as there is now to excel in horses. My father always had a good yoke, and when he went away into the army—from which, by the way, he never came back—we took up his work, and inherited something of his ambition to possess a good yoke of oxen.

We had one yoke that surely were as fine as any farmer need to ask for. My brother and I raised them from calves. When they were less than a year old we had a little yoke, and broke them to draw a small sled and light loads. They were our particular chums, so gentle and kind that we could do anything with them. As they grew older and stronger we had a larger yoke, and set them to work doing other kinds of business about the farm. For work in the woods, skidding logs or plowing they were better than any span of horses I ever saw. Many a time I have drawn loads of logs and hemlock-bark on the road with them to the village five miles away, sitting up on top of the load, and driving the steers from that high position.

Only once did they get the advantage of me, and that was one day when we started to roll some land with them. It was the first time they had been hitched to a land-roller, and someway they did not like the looks of the thing rolling along behind them. Old Bill kept one eye turned back over his shoulder at the mysterious affair, and all at once they both gave a grand leap away from me, and out into the road they ran, taking a bee-line down the hill. For about half a mile they ran at the top of their speed, the roller bobbing up first at one end and then at the other in the mad chase. It scared us boys, and yet when it was all over and we had surrounded the steers we had a good laugh over it, and have laughed many a time since whenever we thought of that mad race.

For hauling logs and stones and doing many kinds of farm work no team is equal to a yoke of oxen, and when ready to be turned off they bring a good price. I remember the yoke our boys had was sold for one hundred and ten dollars, and it almost broke our hearts to see them go. E. L. VINCENT.

PAIR OF YEARLINGS BROKEN BY TWO LITTLE NEW YORK BOYS—CHARLES AND PETER DINEHART

Gardening

By T. GREINER

SOME FISH can be caught with very poor bait. There seems to be an inexhaustible supply of creatures, both in the water and on land, that are always ready to snap at everything that makes even a faint show of promise.

ALL IMMODERATE CLAIMS must arouse suspicion. Experienced cultivators usually hesitate to place much confidence in self-styled "small-fruit princes," "strawberry kings," etc., or in seedsmen who claim to be the only ones worth trusting.

NO BETTER PROOF of his reliability and good services rendered could be given by any seedsman than the fact that he has been able to retain the bulk of his customers for twenty or more years. And there are a whole lot of them in the United States who can justly claim having done that. Beware of the seedsman who through a sensational style of advertising must hunt up new victims every year.

GREENFLY ON ONIONS.—A reader in Greene City, Mo., asks what she should do for the greenfly pest, which has ruined her young onions for the past two years. I have never had greenfly trouble my onions in the open ground, although the young plants in the greenhouse were occasionally infested, the lice evidently having come to them from some lettuce or tomato plants near by. In the greenhouse I have usually got rid of these insects by the free use of tobacco-dust, by spraying with strong tobacco-tea, or even by fumigation—that is, burning moist tobacco-stems. For use in open ground I would recommend repeated and very thorough spraying with strong tobacco-tea. Any tobacco-refuse will do for making the tea. Lice can't stand tobacco.

BLACK CURRANTS.—A reader complains that he cannot succeed with black currants. They grow well, bloom well and set well, but the fruit soon drops off. The neighbors grow good crops. Usually the common black currant is an easy crop to raise, and will succeed on almost any soil. If the wood-growth is too thrifty, set the plants on a different and well-drained spot, perhaps where the soil is less fertile. I have had the Crandall currant make an immense wood-growth, bloom and set fruit in greatest abundance, yet without giving me much ripe fruit, and I am at a loss to-day to know where the fruit went to—whether it dropped off, or whether the birds took it as fast as it ripened. I dislike to accuse the robins of it, as they have to shoulder a good deal of blame where there is no question of their responsibility.

GROWING BLUEBERRIES.—I have felt rather discouraged about my blueberries and the want of prospects for a crop. The bush seems to transplant easily enough, and continues to bear fruit year after year, but the growth is very slow, and there seems to be very little chance to increase the plantation by any of the means of propagation known to me. It can be done by raising seedlings, but the seedlings are small and delicate, and they grow exasperatingly slow. I have tried the cutting plan, but the cuttings failed to strike root. The only feasible way of getting a plantation, and a crop after a good many years, perhaps, seems to me to get the wild plants from the woods or swamps, and carefully divide and transplant them into fibrous garden-loam, keeping them well mulched with rotted sawdust or a mixture of this and old manure. I will try this plan once more.

PICKLES FOR MARKET.—A lady in Orange, Cal., calls for recipes to put cucumber pickles in proper shape for the market. The first thing to do, it seems to me, is to grow the pickles. With me, this is the more difficult part of the transaction, as I have to fight beetles of various kinds, some of them very destructive, and diseases besides, the latter sometimes even still more destructive. I usually succeed in getting the pickles, however, by thoroughness in spraying with Bordeaux mixture to which a fair proportion of disparene (arseniate of lead) has been added. On a large commercial scale the pickles are usually gathered every day or every other day, properly sorted, and put in brine, weighting them sufficiently so as to keep them covered with the briny liquid all the time until taken out and sold or canned. Dill pickles are made of the good-sized cucumbers (five to eight inches long) put in alternate layers with grape-leaves and a little dill, and kept under a weak brine until used. In recent years we have found the cucumber-pickle crop fairly profitable, but we can sell all our surplus directly to private consumers at retail prices—fifteen to twenty-five cents a hundred and sometimes more.

EGG-PLANT FOR AN IOWA HOME GARDEN.—The egg-plant delights in almost tropical heat, yet I have not met with much difficulty in growing it to perfection in western New York, and with proper treatment I believe there are but very few localities in the United States where it could not be grown. I have had specimens of the mammoth New York Purple Improved (a variety somewhat later than Long Purple) in good supply all through August, and I believe that in any section except the mountain regions of the extreme northern portions of the country the popular and large New York Purple (Improved or otherwise) will ripen its crop early enough, and be more satisfactory in the end, than the smaller and earlier sorts, although it may be well to try them, too. With the exception of the two last seasons, when the climatic conditions seemed to be unusually unfavorable for the healthy and normal development of egg-plants, the crop has always been one of the most satisfactory and most profitable among all my garden crops, and highly interesting besides. But in a northern climate one cannot hope for best results unless one has good plants to begin with, and these plants ought to be started not later than in March, in good heat, and be grown to good size by the time they ought to go into open ground, which here is early in June. Egg-plant seed needs more heat for germination than does tomato-seed. As less than a dozen plants, if they do well, will supply all the eggs that our Iowa reader's family will most likely desire to use, it may be the simplest way out of the difficulty to buy the plants from a near plantsman. I have done that once or twice when I failed in getting my own plants early enough.

EARLY CABBAGES.—I am asked whether it would pay to grow early cabbages when one has to buy the plants at about seven dollars and fifty cents a thousand. I don't know. It depends on the success the inquirer has in growing the crop, and on his available markets. Early cabbages have hardly ever failed to give me good returns for my trouble and expense, but I have usually retailed most of the crop at four to six cents a head, and have always managed to grow my own plants. It surely does not pay to spend seven dollars and fifty cents for a thousand plants, and then have half or more of them killed by maggots. With me, this is the great enemy of the crop, although in most seasons I manage to save most of my plants by means of watchfulness and the timely application of tobacco-dust or other remedies. It is a comparatively easy task to grow the plants, either in hotbed or in the greenhouse. Don't have the soil too rich for the plants. A common good, rich garden-loam will do, or soil made by rotting a lot of sods cut from an old pasture, with a very little old manure mixed in. The seed should be sown thinly in shallow drills in February or March, and the plants transplanted once, even if they be set only an inch apart in rows two or three inches apart. If the greenhouse or hotbed is kept rather cool, and plenty of airing be given, the plants will usually do all right when taken directly to open ground, which may be done as early as the ground can be put in proper condition. I grow only the plants for the very early cabbages in this manner, and these should be put on the market as soon as large enough. For the next lot I have found it just as well to sow the seed directly in open ground where I want the plants to make the crop.

FINE CELERIAC.—I have usually had celeriac in my garden, but never considered it suited to any other purpose than flavoring soups, etc., or possibly the bulb, cooked and sliced, to be eaten with raw cabbage as a salad. We get new ideas sometimes. While at a farmers' institute at Cuyahoga Falls, Ohio, not long ago, Mr. O. S. Warner told me how delicious his celeriac is when eaten raw with bread and butter, like radishes. To prove his contention, he brought me the plant here illustrated. The plants were grown last summer in the usual way, slightly banked up in the fall, and covered with straw or strawy manure at the beginning of cold weather, being taken out from under the covering during winter. I agree with Mr. Warner. My one plant was cleaned, peeled, etc., and proved as delicious, including the stalks with the root, as any celery I have ever eaten. Of course, I must have some the coming season, to be treated in a similar way.

CELERIAC

HOLLOW CELERY.—A reader in Coatesville, Pa., tells me that his Golden Self-Blanching celery has usually given him a greater percentage of hollow stalks than has White Plume. Once he had Sandringham all turn out hollow, while all other kinds were all right. The evidence seems to be multiplying that the cause of hollowness in celery is found not so much in season, soil or particular treatment as in heredity—in other words, in the selection of seed-stock. Some experiments recently reported by the Maryland Experiment Station are highly interesting and instructive. Plants were grown from seed obtained from different seedsmen, some of the seed being home-grown and some French-grown. The American-grown seed in every case gave a large percentage of pithy stalks. Of the Golden Self-Blanching celery forty per cent of the plants grown from American seed were pithy, while there was not a single pithy stalk among the plants grown from French-grown seed. One lot of "American-selected stock," however, gave in 1902 a crop that was almost free from pithiness, showing that it is possible to grow good celery-seed in this country when proper care is exercised in the selection of seed-stock. Experiences of this kind, if they establish the regularity of the facts here stated, place a heavy responsibility on our seedsmen. In the present state of our knowledge we would have to pin our faith to French-grown seed. Last year I had two kinds of Golden Self-Blanching celery seed from one of our old-established seed-houses, and there was not a hollow stalk found in the crop grown from either. I had some poor stalks in a lot of White Plume and Rose-ribbed. With me, the Golden Self-Blanching is so uniformly superior to the White Plume, making such compact bunches and such fine-flavored, solid stalks, that I feel like throwing the White Plume entirely aside; yet I may have just happened to get a more carefully selected strain of the Golden Self-Blanching and a comparatively poorer lot of the White Plume. Weather and soil conditions are probably not entirely without influence upon the solidity of celery-stalks. By continuing tests on these lines we may be able after a while to come to the real truth in regard to the hollowness or pithiness of celery-stalks.

Fruit-Growing

By S. B. GREEN

SPRAYS, LIQUID AND DUST.—D. B., Nevada, Mo. It is very probable that in average seasons you will find that the best results will be obtained from the use of what is commonly known as the liquid spray. The dust spray has recently received considerable attention, and is undoubtedly a good thing. One great advantage of it is that it is more easily handled by the small operator, and the work is done rather more quickly. On the other hand, it is seldom done as satisfactorily as can be done with the liquid spraying-material. I would like to give you definite directions as to methods of spraying, but in order to do that I shall have to know what you wish to spray for, as such information is absolutely necessary in order to answer you intelligently.

GROWING PINEAPPLES.—H. C., Vincent, Ohio. If the leafy end is cut off of a pineapple, and it is kept warm, it will continue to grow and send up flower-stalks and produce new pineapples. The same holds true in regard to the sprouts that form around the sides of many pineapples. But in order to accomplish this successfully the plants must be kept very warm, and much warmer than a dwelling or greenhouse is generally kept. Unless kept at a high temperature they may grow for many years without producing any flowers. The only part of this country where the pineapple is grown successfully is in extreme southern Florida. The plant will fruit in an ordinary six-inch flower-pot, but when grown in a favorable climate they will require much more room, as they will be much larger in size. They need a rich soil, and must be given plenty of water in their growing-season.

MAKING CIDER VINEGAR.—F. P. H., Easton, Pa. The cider which you put in your cellar, and which failed to make vinegar after fifteen months, will probably make good vinegar yet if it is given plenty of air. If the bung was left in the barrel in your cellar, then I should not be surprised at its failing to become good vinegar. If it was left out, however, I should have thought it would have turned sour by this time, although in some cellars where there is but a small circulation of air, and the temperature is quite low, it might fail to change properly even after the lapse of fifteen months with the bung out. I would advise you to put the barrel outdoors as soon as spring opens. Leave the bung out, but cover it with cheese-cloth or similar material that will keep out dirt and insects, but will allow the air to enter freely. It would also be a good plan for you to draw the cider from the barrel, a bucketful at a time, and pour it in at the bung, until the whole had been thoroughly aërated. With this treatment I have little doubt but that you will get good vinegar in a few months.

TOP-GRAFTING—BEST APPLES AND PEARS.—A. C. B., Walton, Oreg. Cherry-trees are not easy to graft, and yet if the work is done early in the spring, before the buds start, using scions cut at that time, a fair degree of success may generally be attained. The same will apply to prunes and plums, which are much more easily worked.——The best soil for French walnuts, butternuts and black walnuts is an open, porous clay soil, but they will do fairly well upon any first-class upland soil in your section. The best success in grafting this class of nuts has come when the scion has been inserted in one, two and three year old seedling plants at the collar early in the spring. Cleft-grafting on the smaller branches early in the spring, as for plums, has also been fairly successful.——Among the best varieties of apples are the following: Tallman Sweet is probably the best winter sweet apple for your section. For summer, Red Astrachan and Duchess; for autumn, Gravenstein and Wealthy; for early winter, Jonathan and Belleflower; for late winter, Spitzenberg and Newtown Pippin. Some of the best varieties of pears are as follows: For summer, Clapp and Bartlett; for autumn and early winter, Duchesse d' Angouleme, Anjou and Bosc; for late winter, the Winter Nelis.

Method of Protecting Peach-Trees

In a recent article Prof. J. C. Whitten, of Missouri, writes: "The best means of protecting peach-trees from borers, so far as is known to the writer, is through the use of tobacco. If any borers are in the tree (as will be indicated by the gummy substance near the ground), they should be removed by means of a sharp knife. Tobacco, either in the form of stems from the cigar-factory, tobacco-dust, or tobacco-plants grown for the purpose, should be applied at the roots of the tree. The best way is to have tobacco-leaves, wet them so they will bend without breaking, and removing the earth at the base of the tree, wrap the tobacco-leaf around the trunk of the tree, so the latter will be covered by it from the roots upward to several inches above the ground. The nicotine from the tobacco will prevent the borers from entering the tree. In the absence of the tobacco-leaf, tobacco stems or dust may be placed closely around the base of the tree, above and below the ground. If the tobacco stems or dust is used, it will take some time for the earth above the crown of the tree to become saturated with it. In this case the borers may be kept out temporarily by putting on a cheap bandage of cheese-cloth, wrapped in a strip around the trunk, well down to the roots. Care should be taken not to use too much tobacco, as a large quantity of it may injure the tree itself. The tobacco should be renewed in small quantity each year until the earth becomes well saturated with nicotine."

Just a Little Girl

sent us three new subscribers to FARM AND FIRESIDE at twenty-five cents each. She wanted to see FARM AND FIRESIDE grow and reach the million-mark. Just one from each reader will do the work. FARM AND FIRESIDE is only twenty-five cents a year.

Poultry-Raising

By P. H. JACOBS

Improved Kerosene Emulsion

Some poultrymen claim that kerosene emulsion is not always effectual when used for destroying lice in the poultry-house. An excellent time to spray is on wash-days, once a week in summer and once a month in winter not being too frequent. A sprayer should be used, so as to apply the emulsion to all the cracks and crevices. To prepare the improved emulsion, cut up one half pound of hard soap into one gallon of water; let this boil until the soap is completely dissolved, then remove it from the fire. Now add one gallon of kerosene and one gill of crude carbolic acid, and with the sprayer churn the mixture for five minutes. Agitate it briskly, so as to have the substance thoroughly mixed. Kerosene will not mix with water, but can be churned and mixed with skim-milk or soap-suds. It should be of the consistency of cream when well mixed. Take plenty of time, and churn the substances well. Now slowly add to this, stirring while so doing, one tubful of soap-suds that were used for washing, and one gill of cedar-oil; again agitate with a sprayer, dipping out one bucketful at a time, and spray over every portion of the poultry-house, into all cracks and crevices, as well as in the nests. Sponge the roosts with the pure kerosene. By this method lice can be kept down, as the mixture destroys them immediately. All creatures seem to have parasites peculiar to themselves, not even excepting man, but the existence of the vermin depends entirely upon conditions that permit the pest to breed and multiply. The fowls rid themselves of lice by the use of the dust-bath and by natural oils of the body. In their natural condition they are privileged to leave any location infested with vermin, but our domesticated fowls must remain where their owners prefer them to be. Such being the case, the birds cannot be free from vermin unless their quarters are clean and ridden of the pests.

A CORNER OF A PENNSYLVANIA DUCK-FARM

Early Green Rye

Some poultrymen and farmers sow rye in the fall as special early spring green food for poultry. As rye provides late green food in the fall, and makes a start before grass in the spring, it is a valuable crop. When it appears early in the spring, it is excellent for poultry, but the hens should not be turned on rye as an exclusive food. It is laxative in its early stages of growth, and the fowls will fall off in weight if allowed to have full liberty in the rye-field. Let them go on the rye but a short time each day, gradually extending the period until they have become accustomed to the change to green food, as young rye contains a great deal of water, too much being injurious.

The Spring Layers

This spring the hens that are worth keeping will give good results if they have not laid during the winter. One of the objects should be to keep the early hatched pullets, which should be hatched from eggs laid by the most prolific hens. There are always a few good layers in each flock, and when it is noticed that a particular hen seems to excel the others in laying during the season, do not sell her because she ceases to lay for a while, but keep her another year. It is always safe to retain a hen that has shown herself profitable. Hens often last four or five years, and it is time to dispose of a good hen only when she begins to fail. It is frequently claimed that many hens produce two hundred eggs in a year, but such hens are exceptions, as it usually requires two months for molting; but no farmer should be satisfied with less than ten dozen eggs a year from each hen, and even more should be the object.

The Droppings

As winter seals up the droppings and prevents odors, there is usually less attention given in that direction than after warmer weather appears. In many cases the droppings are worthless, owing to the manner in which they are preserved. If mixed with earth, and kept dry, they become hard and insoluble, often possessing little or no fertilizing value. The proper plan is to put the droppings in a barrel, with an equal quantity of sifted earth, and keep them damp (not wet) with soap-suds. There will be formed fat acids from the suds, and various "salts" will result, the droppings then being in a soluble condition, the ammonia also being preserved. Empty a barrel of such droppings on the ground, and one will have to stand at a respectful distance to avoid the odor of ammonia. Water absorbs ammonia, and the moist condition of the droppings induces decomposition, ammonia escaping as a volatile gas if not arrested by the soap-suds, which seem to prevent loss. If a small quantity of kainite is also added, the result will be even more satisfactory.

Inquiries Answered

Indications of Disease.—"Subscriber" states that "the droppings of his fowls are greenish and yellow, and asks the cause and cure." Such conditions are not unfavorable, nor do they indicate disease if the fowls are otherwise lively and not drooping.

Ventilation.—C. D. N., Pittsfield, Mass., requests information as to the "best method of ventilation." The problem of ventilation has not yet been solved. It is believed that any method will answer that does not permit of cold drafts over the fowls at night.

Chandlers' Scraps.—J. S. C., Paris, Maine, states that he cannot procure "chandlers' scraps." Such scraps may be so styled, though in reality the ordinary meat scraps, meat-meal, animal-meal, etc., are referred to. Local terms are sometimes confusing.

Probably Lice.—Mrs. S. E. P., Granite Falls, Minn., asks "what is the matter with well-fed chickens that become poor and weak, dying after a few weeks." Such condition may be caused by the large body-lice, or there may be some disease, though no symptoms were mentioned. Try the advertised lice-remedies, as they are excellent.

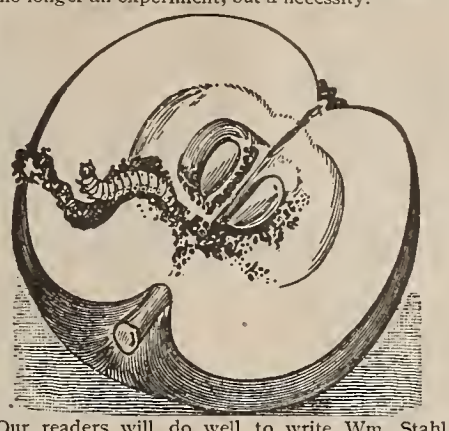
Closed Eyelids.—J. E. B., Vermilion, Mont., wishes to know "the cause of swollen eyes and blindness among his chickens." A satisfactory answer cannot be given without knowing the conditions of management. Such difficulties are usually due to cold drafts over the fowls at night, the remedy being to wash the eyes with chlorinated-soda solution.

Do It Now

We want to add thousands of new subscribers to Farm and Fireside within the next few months. We must ask our friends and neighbors to help. If each reader will send just one new subscription to Farm and Fireside we will soon have a million. Help the good work along by sending just one—more if you like—new subscriber at twenty-five cents a year.

SPRAYING FRUIT TREES

The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an experiment, but a necessity.



Our readers will do well to write Wm. Stahl, Box 1, Quincy, Ill., and get his catalogue describing twenty-one styles of Spraying Outfits and full treatise on spraying the different fruit and vegetable crops, which contain much valuable information, and may be had free.

VICTOR Incubators are truthfully pictured and their actual working told in about 30 of the 80 pages of our new catalogue. The rest of the book gives information about the chicken business. We begin the story in the egg and end it with the marketing of the fowls. There's knowledge which will benefit anyone and may mean dollars to you. Our incubators are driving hens out of business. They work regardless of weather or of seasons. You can count on hatching every fertile egg. Money back if not all we claim. We pay freight. The book is free. Just say "Send Victor Book" and we'll do it. GEO. ERTEL CO., Quincy, Ill.

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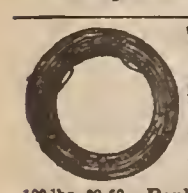

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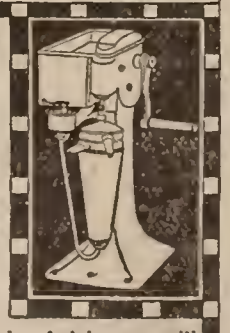

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Live Stock and Dairy

The Little Pigs' Mother

PROPER and good motherhood may be developed in swine, and when a sow shows the proper tendencies, every encouragement should be given her, and she should be retained at her good work of multiplying her tribe until her ability to continue is affected by old age. The office of such good motherhood consists of more than simply bringing forth large litters of pigs. The litters should be uniform in the size of the individuals, and the latter should be thrifty, which would indicate that the dam is a good milker. She should be gentle and not easily excited, and be so much of the "dairy type" that she would have capacity for consuming plenty of feed and turning it into milk, and not make her own body round and fat with it. Whether she shall mother pigs that are good, thrifty and profitable until the end of their days at market will of course require some time to determine, and if the determination shall be in her favor it should be equal to an insurance of a long and carefully tended life. She cannot be judged without a trial, neither can she nor any of her successors be expected to do profitable work as mothers while in the growing period of their own immaturity. Therefore, if by reason of inheritance from a good mother and a good paternal grandmother the young sow should be a good mother, before condemning her give her the chance of maturity. W. F. McSPARRAN.

Improvement of Live Stock

Mr. Geo. McKerrow, superintendent of farmers' institutes, Wisconsin, brought out such excellent points at the Ohio State Farmers' Institutes that they ought to be blazoned high on the walls of every farmer's home.

"The field for improvement of live stock," said he, "is broad as the universe, and deep as the divine law. Men will concede the advisability of improving our stock, but they have small conception of what is needed. When one stands at the head of a long line of show-winners, and sees the variation all along the line, he then begins to realize how great is the need of improvement, not only in the stock, but in the ideals of stockmen. A study of market prices indicates the wide range between poor cattle and the best types. And even our best types could be vastly improved.

"To be a successful breeder or feeder, a man must have firmly fixed in his mind an ideal type of the animal he wishes to produce. This education of taste should begin in boyhood. Place before him good literature; let there be ideal pictures always in view; secure the best special journals. Begin the education at home, give him all the advantages of the common and high schools, and round and complete his training with a course in a good agricultural college. Take your boy to the best fairs where animals of a high grade are shown; mingle with experienced stockmen; impress upon him that if he would maintain and increase the fertility of the soil it must be done by the keeping of live stock.

"I am saddened at the poor animals often found in the barns of our agricultural colleges. We send our lads to the college to form correct ideals, and place before them as an object-lesson animals that would fare ill at the hands of competent judges. The farmers are to blame for this condition of affairs. They should organize, and push for appropriations to build up-to-date barns, and stock them with the best individuals of the various breeds. As an example of what earnest, combined, persistent effort will accomplish, I will cite but one instance. Our live-stock association went after ten thousand dollars for stock for college, and it went through the legislature without a dissenting vote. It then demanded an appropriation for sending live stock to St. Louis. The legislature promised enough money to employ a man to go over the state to drum up exhibits. The association refused this, called a meeting, and with united front asked and got ten thousand dollars. Legislatures will accord to agriculture its just rights when the farmers demand and maintain their position.

"What breed shall you select? That depends on your taste, what your neighbor breeds and the market demands. Select the very best individual of the breed you like best, developed and selected to a high ideal in your own mind. If a number in the same community breed the same kind, it will be an inducement to buyers to come to you. After selecting a breed, stick to it. The man who is constantly changing is the one who loses. He buys on a high market to sell on a low. Don't forget to give an annual cross of good feed, for the feed is of as much importance as the breed.

"Cull your flocks, or herds, carefully. Get the very best sire possible. Not necessarily one of fancy line of breeding, but one destined to impress his progeny with the ideal points in your mind. Remember that the sire is half the herd, or flock, and be not 'penny wise and pound foolish.'

"Feed a balanced ration, and in variety. Not the variety that some farmers practise—that of feeding stover until it is gone, then timothy, then alfalfa, etc.—but have a pleasing variety all the time. Build up muscle and bone as the animal grows. Study feeding-methods with utmost care. The fees of the veterinarians are the tax the poor and ignorant feeder pays for his ignorance."

In all of his addresses Mr. McKerrow insisted upon correct ideals, the reading of the best special literature, the study of ideal pictures, and constant improvement of the man. His improvement would naturally bring about an improvement of his stock. MARY E. LEE.

The Man Who Knows

When Professor McKay of Iowa State College announced to the Dairymen's Association that W. C. Barrett's butter scored ninety-seven and one half per cent, and that he had won the sweepstakes prize, there were loud calls from the audience of "Barrett! Barrett!" What was the surprise when a beardless youth of perhaps twenty years modestly rose. He was greeted with enthusiastic and prolonged applause, and called to the platform to tell the process of making first-class butter. There was no guesswork, but from start to finish accurate attention to details along the line of scientific principles in butter-making. To make the butter that won the first prize, he insisted upon the milk being in the best possible condition, and from the moment the milk came into his hands to the time he took one hundred and thirty-eight pounds of butter from the churn, he relied upon scientific data—the recorded experience of investigators who had proved the accuracy of their discoveries. He placed no dependence in signs and ordinary tests. He knew. And his hands followed the dictates of his brain. And that proud moment when he was the cynosure of all eyes, when university men, faculty, alumni and students, practical dairy men and women, and representatives of the press from a dozen different states, gave earnest attention to the story of his work was but the logical result of bringing science and skill to bear on the daily work of life. He knew. There was no loss from ignorance and carelessness or inefficient, ill-directed labor. To him all doors are open. He need not seek a situation. It will find him.

In 1902 he was working on a New York dairy-farm. In January, 1903, he entered upon the short course in dairying at Ohio State University. Upon the recommendation of Professor Decher he found employment with L. P. Bailey, an excellent and upright business man of the highest type. It was at this dairy that the prize-winning butter was made.

When the exquisite neatness of packing was commented upon, he said, "I packed it as carefully as I could, so that if I should lose a little on flavor I could be perfect on packing and those things that are controlled by workmanship. 'Ever since I have been in the creamery it has been my rule to try to make each tub of butter look better, if possible, than the preceding one."

Such are the principles, efficiency, skill, attention to details and absolute honesty that win success, not only in the dairy, but in every walk of life. Business men are glad to pay for these qualities, and the young man or woman possessed of good manners, honesty and skill need not long go hunting a situation.

Not every one may win recognition so young. Various combinations of circumstances over which the individual has little control may prevent an early fruition, but time will bring its reward. And who can tell but the time of waiting was but needful preparation? MARY E. LEE.

A Problem

Perhaps more than a million people read the more than three hundred thousand copies of FARM AND FIRESIDE twice a month. What would be the result if each reader were to send in just one subscription? It doesn't take a mathematician to figure that out. Will you send that one just to help the good work along?

Live Stock and Dairy

Two Good Bulls

WE LOVERS of the Channel Islands breeds claim that our favorites have no equals as dairy-animals. In fact, for such a length of time have the Jerseys and Guernseys been bred for the single purpose of producing large quantities of very rich milk, it would be very strange, in consideration of our knowledge of breeding and proper feeding, if an intensification of the qualities which have been sought for were not attained.

The bull is supposed to be half the herd, which of course he is, in a sense. Some breeders expect to acquire good qualities for the offspring from the inherited and prepotent good blood of the sire more than from the excellencies of the dam. Other breeders—and among them I number myself—while granting to the sire all power he may possess, like to have the good points of the dam a consideration in making up their estimate of the value of the offspring. There are so many uncertainties, however, in the matter of breeding that the most careful breeder will strive for goodness in both sire and dam.

JERSEY BULL—BOBBY'S SHY FOX

The illustrations on this page are from photographs of two superb bulls which I caught at the Illinois State Fair last fall at Springfield. They are two such fine specimens of their breeds that the student of dairy-form may profitably study them.

The Guernsey, Homestead's Golden Duke No. 6906, won first prize as a yearling in 1901 at the state fairs of Ohio, Kentucky, Indiana and Illinois, second at New York, and first as a two-year-old in 1902 at all of the above state fairs. Last year in the class for aged bulls, he won first at Ohio, Indiana, Kentucky and Illinois. His dam, Golden Anne, has given forty-six pounds of milk testing five and one half per cent in one day, and her estimated butter-yield in one year, by Babcock test, is five hundred and fifty pounds. Golden Duke is a great bull both by inheritance and his good looks.

GUERNSEY BULL—HOMESTEAD'S GOLDEN DUKE

Bobby's Shy Fox, the Jersey, was a show-bull on the Island, winning sweepstakes at the St. Saviour and Grouville shows in 1902 in a class of twenty-eight entries. He was imported by Mr. T. S. Cooper, one of the best judges of Jerseys in the world, and by him sold to his present owner. He is a son of Champion Flying Fox. At Elk's Fair, Lexington, Ky., and at the Ohio State Fair at Columbus last year, he was winner in his class. At Kentucky State Fair, Illinois State Fair and at St. Louis Fair he succeeded in carrying off the championship over a large number of competitors.

W. F. McSparran.

Cows in Springtime

A good many times farmers keep their cows in the barn until the grass in the pasture is rank, and then turn them right out to get their living, dropping at that time all hay and ground feed. This is a bad practice. The cows, shut up so long away from green feed, gorge themselves with the fresh grass, which tastes wonderfully good to them, with the result that their bowels are suddenly relaxed, and a consequent weakening of the entire system follows. The cow suffers a marked loss of strength and vitality.

The best way to get the cows accustomed to the change of diet in springtime is to let them out a little while each day for say a week, allowing them to get enough grass to partly satisfy their appetites, and then get them back to the yard. Every day during the time this process is going on lots of nice bright hay should be given, together with a good ration of ground feed, preferably wheat bran and cornmeal. In this way the strength of the cow will be kept up, and her condition gradually made ready for the time when she will be sent away to graze all day in the pasture.

Almost every farmer has noticed that for a few days after the cows are turned to pasture, especially if treated according to the plan mentioned above of turning the cows suddenly out to grass, the cow will drop off in the amount of milk she gives. This is undoubtedly due to the sharp turn in the method of feeding, and the tendency with most cows to roam all over the fields for a while when first released from their long imprisonment. E. L. Vincent.

Millet Hay

Hungarian grass and the millets are heavy yielders, but judgment should be exercised in their use as feed. Many serious results due to their use have been reported from different states, so that much has been written tending to show their absolutely poisonous qualities. Professor Bailey of the Cornell Government Experiment Station says that when properly fed millets may be used without danger, and are valuable. Animals not accustomed to green forage should not at first be allowed a full feed of any green crop, but should be given only a part ration of the green material. Much of the value of millet seems to depend upon the time of cutting, which should be soon after blossoming. It is generally advised to feed some other coarse fodder when millet hay is fed to horses. M.

Hundreds of boys were given watches last month for sending us eight subscriptions to Farm and Fireside at twenty-five cents each. Write for our easy plan, and earn one for yourself.

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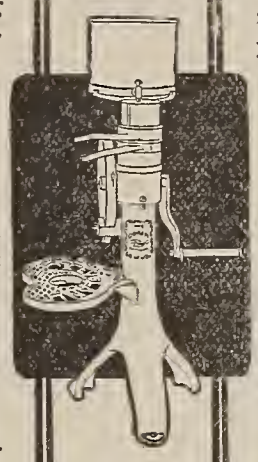

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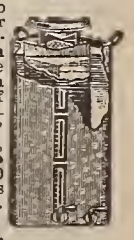

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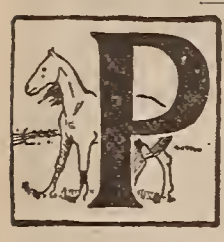
WORMS IN HORSES



PIN WORMS (*oxyuris curvula*) infest the large intestine of the horse. They are usually about two inches to two inches and a half in length, and pointed at either end.

These parasites flourish in animals that are in low condition, when the mucous membrane of the intestine is in an unhealthy state. The excretions and exfoliations from the intestinal walls furnish them the favorable habitation.

Cause.—Horses that are long kept on dry food or furnished a single article of diet are frequently infested with these parasites, as such feeding has a tendency to reduce the power of digestion and create an unhealthy condition of the mucous membrane of the intestinal canal. Animals that dislike common salt are often infested with these parasites, as the absence of salt tends to reduce the power of digestion, also.

Dry, rough coat, occasional swelling of the legs, paleness of the mucous membrane, dullness, and becoming easily exhausted, are external symptoms of deranged digestion, which favors the propagation and development of these parasites.

Treatment.—The ill condition found in animals infested with pin worms is not so much due to the worms themselves as to the conditions which favor development of these parasites, as stated above. That is, they are more frequently the result of the ill condition than the cause of it. Hence, the treatment to permanently rid an animal of pin worms must be directed along the line of improving the digestive organs by carefully selecting the feed, giving salt regularly, and toning up the digestive canal with bitter vegetable tonics, overcoming anæmic condition by a liberal supply of salts of iron. Laxatives are also of the utmost importance. Dr. Hess Stock Food contains these ingredients in exactly the proper proportions, and is guaranteed to remove these parasites. It increases the strength, and renews the sleek, glossy coat. It is formulated by Dr. Hess (M.D., D.V.S.), and is endorsed by eminent veterinarians and leading colleges. If they know of nothing better, it must be good. No unprofessional manufacturer can equal it. Sold on a written guarantee. 100 lbs. $5.00 (except in Canada and on Pacific Slope); smaller quantities at a slight advance. Fed in small doses.

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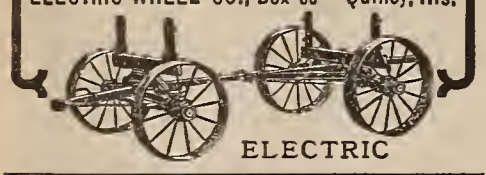
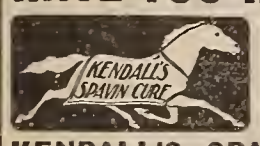


HAVE YOU HORSES?



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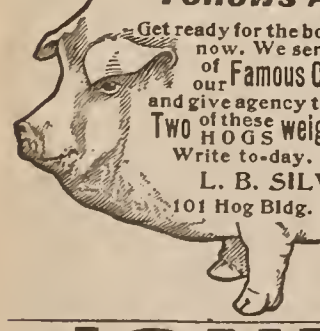

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The Grange

By MRS. MARY E. LEE

What Granges are Doing

YOUR grange is making a success of some line of work. It has accomplished something of which it is proud. It has benefited its locality. I want short reports of what has actually been done. Write me, and I will be glad to give the result of your experiences, that others may profit thereby. What have you done to make your meetings interesting and beneficial?

Grange-Work in Ohio

The work in Ohio is growing marvelously. At institutes and meetings of farmers the question of organization is one of perpetual interest. The rules of the State Board of Agriculture will not admit of grange-talk by the state lecturers unless it is asked for by the local committee having the program in charge. Several of the lecturers have addresses bearing on this subject, and nearly every local institute in the state has called for one or more of these addresses. This shows the drift of sentiment in Ohio.

A Public Convenience

Bremen is a little town of about six hundred inhabitants. A fire destroyed many of its best buildings one year ago, but the progressive business men built on the ashes buildings that would do credit to a city. Mr. Shellhamer, a public-spirited business man, built a fine block. He has set aside one room as a "convenience room" for citizens. It is furnished with table, chairs, stationery, telephone, and is well lighted and heated. It is used as a committee-room, waiting and lunch room for farmers, writing-room—in short, it is open to the public without cost. Mr. Shellhamer's public spirit is worthy of imitation. Every town should have such a room, maintained either by public or private generosity. The grange of a community could extend its influence by maintaining such a room, and keeping it well supplied with grange literature.

Emerson Grange

I had the pleasure of meeting with Emerson Grange, Jefferson County, Ohio, early in February. This grange has been organized eight years, and is doing excellent work. The lecture-hour is always held before the business-hour, thus insuring the certainty of a literary program. The hall is comfortably furnished, and has a piano. With a membership of thirty-seven, there is an average attendance of fifteen. This does not tell the story exactly, for aside from stormy days the attendance averaged twenty. The members are of the Society of Friends, intelligent, progressive, with a deep sincerity that touches the heart and gives new hope for the future.

The homes are beautiful, and filled with rare old china and silver, quaint, antique furniture that delights the eye of the connoisseur. To a lover of the furniture and silver of the last three centuries a visit to this place would be one of delight. It would not be strange that from such homes would come men and women imbued with graciousness, sincerity and simplicity, zealous for the very best possible life.

National Grange Letter

OFFICE OF LEGISLATIVE COMMITTEE
February 8, 1904.

To members of the grange throughout the United States:

It seems proper to make a statement in regard to the status of the good-roads legislation in Congress. As previously reported, the legislative committee of the National Grange prepared a bill providing for national aid to road-building, which was introduced by Congressman Currier, and has been printed and widely circulated.

On February 2d a conference was held between Congressman Currier, Congressman Brownlow and Senator Latimer, who had also introduced bills upon the subject, which conference resulted in an agreement upon the matter, and the preparation of a bill which all are to support. This bill has been introduced in the House by Congressman Currier, and also in the Senate by a member of that body. It is highly complimentary to the members of the grange that the bill thus agreed upon is practically the grange bill. In fact, it differs from it only in a very minor matter, and is to be given precedence in both branches of Congress over all other road bills. This bill should have the enthusiastic support of the members of the grange and the farmers in all sections of the country. It carries an appropriation of twenty-four million dollars, available in 1905, 1906 and 1907, to be distributed among the several states and territories in proportion to population where a similar amount for a similar purpose is appropriated.

This seems to be the opportune time for the grange to make its influence felt in a matter of great importance to the farmers. Letters and petitions to congressmen and senators should be forwarded at once urging the passage of this bill, which, as we have said, is practically the grange bill. Action should be prompt, vigorous and specific, and followed up with subsequent appeals if circumstances seem to make it necessary. Do not delay, for this is a matter of great importance.

AARON JONES,
E. B. NORRIS,
N. J. BACHELDER,
Legislative Committee National Grange.

Grange-Spirit

From all sections of the country come reports of increased grange-activity. Farmers are asking that workers be sent to them to explain the grange. They realize the necessity of organization and the advisability of going into an order that has a strong foundation, and has made a reputation that Congresses and societies and people respect. They want an organization that is ready to work, that they can go into and make their influence felt at once—an organization with a history of usefulness and a future of power. From every state men and women of the farm are coming together, asking for better things, seeking a way to secure for themselves a broader culture and an enlarged outlook.

Rush Creek Grange

The Bremen, Ohio, institute was an excellent one. From start to finish the fine new opera-house was packed with an eager, attentive audience. The speakers, State Master Derthick, and S. E. Strode of the "Stockman and Farmer," made splendid addresses. It was a grange crowd. President McCullough made an excellent address, and when told it was grange doctrine, replied, "I did not know it, but it's what I believe." The local committee called for lectures on "Organization" from the state speakers. As a result a fine grange was organized at Bremen, and named Rush Creek Grange. Granges will soon be organized at other points in the county. This leaves but one county in the state without an organization, and two points have called for an organizer.

Rush Creek Grange starts out with excellent prospects of success. From it will be reflected light that will lighten many a path, open up a bright future for many a struggling soul.

The Observatory

"Genius is partly inspiration, but mostly perspiration."—Edison.

Emerson Grange holds sessions twice a month in winter, and once a month in summer.

Amesville, Ohio, Grange tendered a reception to Hon. F. A. Derthick on February 18th.

Earnest, conscientious work on the part of each member of the grange is sure to result in a good working grange and win respect for the order.

"As I travel over a great many states in conducting institute work," says Mrs. J. W. Bates, "I find numerous charts on feeding animals, but never have I found a chart with a properly balanced ration for feeding the baby."

Mr. Derthick's address on organization at farmers' institutes results in large accessions to the order. Several new granges have been organized. From one address at one point three communities pledged themselves to organize granges. An organizer was sent. Such work counts.

S. E. Strode, past lecturer of Ohio State Grange, and grange-editor of the "Stockman and Farmer," is meeting with great success as an institute lecturer. In West Virginia he draws the largest crowds, and is in constant demand. Seven granges resulted from his lecture-work in that state.

Now is the Time

to send just that one new subscription of a neighbor friend to FARM AND FIRESIDE. It would help build up the list, and at the same time be doing your neighbor a favor. FARM AND FIRESIDE is only twenty-five cents a year.

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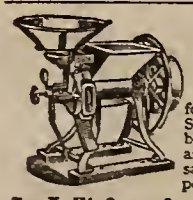

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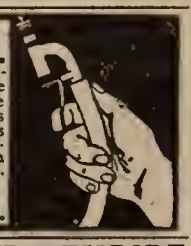

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Elegant stock. Tremendous yields. From 400 to 1000 bushels per acre.

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and this notice we send you lots of farm seed samples and big catalogue, telling all about Teosinte, Speltz, Peaoat, Aerlid Land Barley, Macaroni Wheat, Bromus, Earliest Cane, etc. Send for same today. F.

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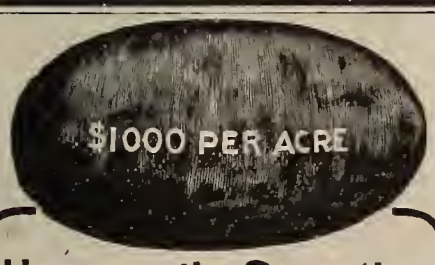

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ALLEN L. WOOD, Wholesale Grower, Rochester, N. Y.

Farm News-Notes

THE Michigan Bean Jobbers' Association places the value of the Michigan bean crop of 1903 at six million dollars. The loss from the wet season is estimated at twelve per cent.

In her encounter with Russia, Japan has undoubtedly dealt a severe temporary blow to our export business in agricultural implements. In 1901 Russia took $1,692,527 worth; in 1903, $3,636,145. This was an increase of almost two million dollars in the short period of three years.

However simple a matter farming may seem to the city-bred man, he will find when he undertakes it that practical knowledge counts. What the practical farmer knows, he knows to a certainty. For this reason new beginners should hasten to avail themselves of the experience gained by the most successful farmers during many years of practice.

It is reported that Louisiana is about to establish a quarantine against localities in Texas where the cotton-boll weevil has found its way. No cotton-seed or hulls, seed-cotton or hay, straw, oats or corn is to be admitted into the state. Oklahoma and Indian Territory would do well to adopt a similar course. "An ounce of prevention is worth a pound of cure."

Denmark has been the pioneer in co-operative production and marketing. The quantity and quality of dairy and other products have been increased, and higher prices for the farmer have been obtained. It is estimated that the saving to the Denmark farmers in 1902 was fully seventy thousand dollars. Coöperation when conducted on business principles rarely fails to pay.

A leading English agricultural journal says: "Forty lambs fattened on roots grown where superphosphate was used as a fertilizer failed to do as well by eight per cent as where basic slag was used." This shows that basic slag (Thomas phosphate) is superior to superphosphate in raising roots for feeding lambs. Moreover, the same has been fully demonstrated in respect to the quality of grass grown on heavy clay soils.

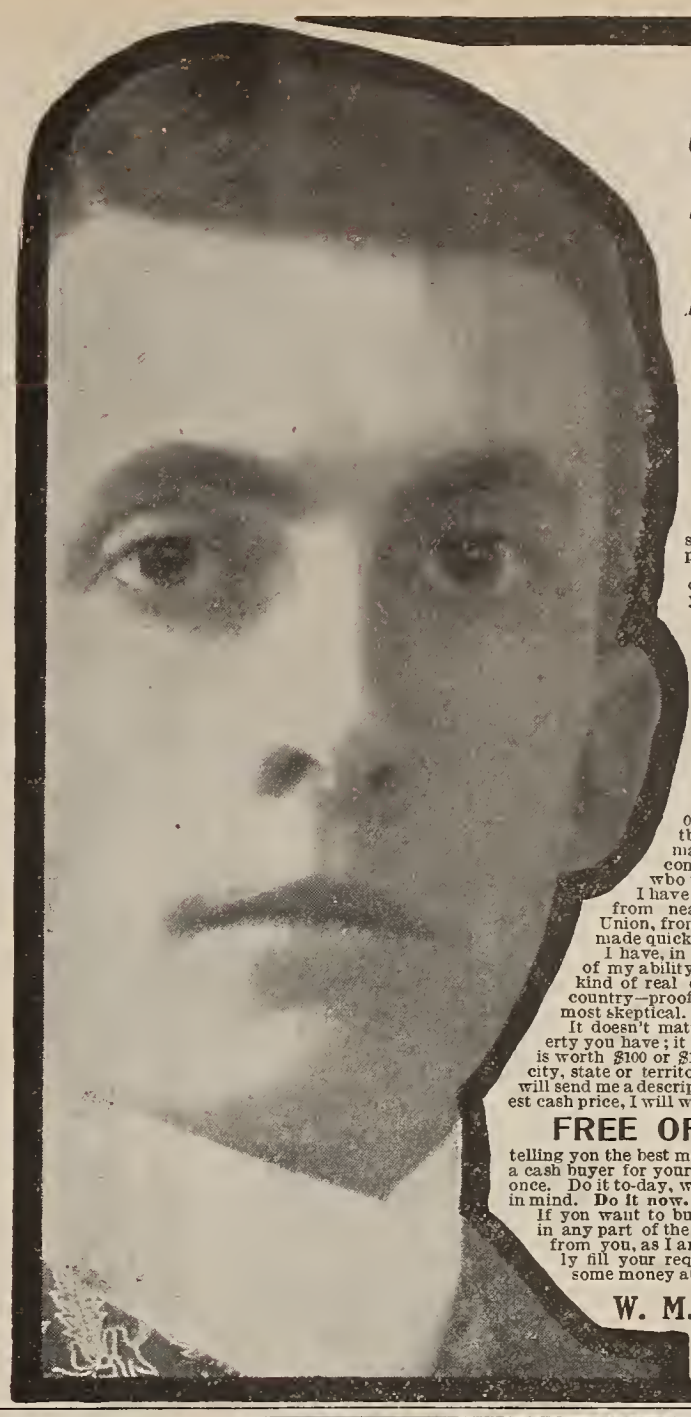
The strong hold that the potato has in the estimation of European farmers is shown by the fact that a ton of choice seedling-potatoes was recently sold at the National Agricultural Show of Ireland for twenty-five hundred dollars. This would be at the rate of fifty-three dollars a bushel. The potato crop of Great Britain and Germany has assumed immense proportions, and the importance of improved seed is fully appreciated.

There is no dearth of opportunities for young men and young women in the cotton-growing states. The opportunities are there, and they should be seized at once. Modest investments judiciously made will parallel those in far more remote sections of our country. The South is being filled with progressive and prosperous farmers, and commerce and agriculture are sure to keep pace with each other. An era of rapid development is at hand.

Prof. Bert H. Hite, M.S., chemist at the West Virginia Agricultural Experiment Station at Morgantown, claims that he has discovered a practical method of preserving eggs. The egg is first dipped in an alcoholic solution of salicylic acid for a few moments, to destroy germs or microbes that would otherwise gain access to the egg. Each egg is then wrapped in cotton, to further protect the egg. The eggs are then packed in boxes through which the air can circulate freely.

The craze for orchard-planting is on the increase. Many thousands of trees will be planted this spring. The nurserymen need not worry over the future demand for more trees. They have a powerful ally in the San Jose scale. No one need expect to realize any profit if the old methods of orcharding are to be followed. No one should set out an orchard that they do not expect to care for and combat the scale, the codling-moth, the borer, the canker-worm and other destructive insects. The most approved scientific methods are requisite. The money-making methods of the best orchardists in California and other leading fruit-growing states should be followed. Henceforth constant vigilance and an untiring warfare against noxious insects, and a fixed determination to grade and do the square thing in packing orchard products, constitute the only safe ways to deserved success.

* * *



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Do you want to sell it quickly and with the least possible expense?

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For eight years I have been filling these wants for people in every section of the country.

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I have, in fact, every kind of proof of my ability and facilities to sell any kind of real estate in any part of the country—proof that will convince the most skeptical.

It doesn't matter what kind of a property you have; it doesn't matter whether it is worth $100 or $100,000, or in what town, city, state or territory it is located. If you will send me a description, including your lowest cash price, I will write you a letter of advice

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If you want to buy any kind of a property in any part of the country, I want to hear from you, as I am in a position to promptly fill your requirements, and save you some money at the same time.

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CLIP YOUR HORSES
WITH 20TH CENTURY CLIPPER PRICE ONLY **$5**

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equipped with low steel wheels and wide tires embodies every feature of wagon wisdom. Wheels of any size and width of tire. Neither shrink, swell nor need repairs.

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A Free Trial Package is Mailed to Every One Who Writes.

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint, without the use of oil. He calls it Powdrpaint. It comes to the farmer a dry powder, and all that is required is cold water to make a paint weather-proof, fire-proof and as durable as oil paint. It adheres to any surface, wood, stone or brick, spreads and looks like oil paint, and costs about one fourth as much.

Write to Mr. A. L. Rice, Manufacturer, 417 North St., Adams, N. Y., and he will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write to-day.

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and is also cheaper than granite. All we ask is a chance to present the evidence. Then act on your own judgment.

If you want cemetery work of any kind, large or small, write us, stating about what expense you anticipate. A selected variety of our

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with prices and information about White Bronze, will be sent at once—and without putting you under any obligations. We deal direct, and deliver everywhere. Write at once.

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Most complete line made. 1903-4 Patterns Steel Lever Stock Scales are beauties. Prefer man experienced in selling machinery and implements. Fine catalogue. No samples. Can be handled nicely as side line. Liberal contract. Exclusive agency. Have you that man in mind? Show him this paper. He can make money. We want him now. Act quick.

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Largest makers of Farm Scales in this country.

TREES THAT GROW

Hardy varieties that yield big crops. Grafted Apple 5½c; Budded Peach, 5c; Concord Grapes, 8c; Black Locust Seedling, $1.25 per 1000. We pay the freight. Send for illustrated catalogue. English or German, free. I will post you on the right kinds to buy.

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850,000 GRAPE VINES

100 Varieties. Also Small Fruits, Trees, &c. Best Rooted stock. Genuine, cheap. 2 sample vines mailed for 10c. Descriptive price-list free. LEWIS ROESCH, Fredonia, N. Y.

Around the Fireside

Decorative Ferns

FERNS are of such beauty and variety there is hardly any subject better adapted to the skill of the designer or the china-painter. We have selected for this set of plates six well-known species, each one distinctly individual and having marked decorative possibilities of its own. The set may be successfully executed by simply copying these designs and following the directions given; but if one is so situated as to be able to bring ferns to the studio there will be found an added interest.

The groundwork of this set should be a very delicate cream-color, only enough removed from white to make a pleasant harmony with the green and brown tones of the ferns. For a decorative treatment

CLIMBING-FERN

use flat tints, not fussing nor working too much over the delicate leaflets and fronds. Surround each form with a dark outline of brown or of the purplish hue to be found in some of the stems. The dots may be in light shades of green or in gold, or may be omitted altogether. Any simple border of dull gold or harmonizing shades of brown and green may be used.

The crested-shield fern will be found growing in woodland swamps, along streams or in rich, wet woods. Its fronds, glossy and crisp, may be painted a light, delicate green, as tender in tone as the grass of early spring, while the stems are but a shade or two darker. The croziers, or young, uncoiling fronds, should be painted a light brown, being covered with soft scales of this color. The only strong color to be found in this drawing is in the green moss about the roots and the decorative outline of brown to surround the design. Be careful to observe the method of growth of the leaflets on the stem—alternating in the upper part of the frond, but opposite in the lower part.

In low thickets and on the banks of streams may be found the slender twining fronds of the lovely climbing-fern. Paint its larger leaves a warm, rich green, with an occasional brownish tone, the stems darker green, the young leaves much

EBONY SPLEENWORT

lighter, and the curious spray at the end (in reality the fruiting leaflets of this fern) a rusty-brown with touches of green.

Nearly every one knows the maidenhair fern, so unlike all other ferns, with its strong, deep green, vigorous growth and its stems of shining purplish black. The fronds vary in form, and are often heavier and fuller than those in the design. Especial attention must be paid to the young fronds, which are of a dull red color and have along the stem brown, hair-like scales.

The walking-fern is among the most curious of our native ferns, and derives its name from the way its fronds arch over until they touch the earth, when they root and produce new plants. It will be found generally upon limestone rocks, and with its flat habit of growth may easily escape all but the very observant. The leathery, dark green and glossy fronds may be painted with considerable vigor of treatment; the fertile frond in the larger group of leaves in the design shows brown fruit.

On dry banks by the roadside you may often come upon the stiff, quaintly erect little ebony spleenwort. A charming plant is this, with its two kinds of fronds—the sterile ones small, compact and bright green, the fertile ones darker, straight and with a purplish midrib. Many dried stalks and brown, curled-up dead fronds hang about the plant, adding to the picturesqueness of a design based upon it.

The Christmas fern is a most abundant species, and being an evergreen is especially noticeable in the snow-bound season. Its cheerful dark green fronds will call for a stronger coloring than any of its companions in this set of designs. Especial attention should be given to the fertile frond near the center, easily distinguished by its small and undeveloped leaflets near the top; these are darker and duller in color than the remaining fronds. The stems are often covered with a rough hairy growth, at times whitish, then again approaching brown. — Elizabeth Moore Hallowell.

CRESTED-SHIELD FERN

MAIDENHAIR FERN

WALKING-FERN

Scales on the Fern

When the fronds of your fern begin to look brown and dead it is high time that the plant should receive a thorough examination, for a fern takes too long to grow to let it be lost through neglect.

If you have not been keeping it too dry—ferns require to be kept well watered—then probably there are scales on it. Look carefully along the stems and at the root of each leaflet, and see if you do not find what looks to be a little hard brown scale. Examined under a microscope, each of these scales proves to be a nest of tiny eggs, that cannot be numbered. You would not wonder that your fern does not thrive if you saw the under side of one of these scales revealed under a microscope. To the naked eye it seems to be a fine dust that fills them.

Of course, the first thing to be done is to remove them, which can be done by means of a fine needle, examining one frond at a time and making sure that it is free from every scale before taking up another. Then thoroughly sprinkle the plant with suds made from fir-tree-oil soap.

A florist told me never to banish a ladybug from the room where my ferns and other plants are kept, as the ladybug lives upon these scales. I. B. H.

Curious Facts

The streets of Tokio will soon have trolley-cars.

The lion is the only wild animal that is capable of affection.

The United States now takes half the world's crop of rubber.

Haiti devotes almost one sixth of its revenue to free schools.

Rich asbestos-mines have been discovered near Irkutsk, Siberia.

European Russia has a less percentage of forest than the United States.

The baby should weigh twenty and one half pounds on its first birthday.

Every Frenchman is born with a debt of one hundred and fifty dollars on his shoulders.

A sunflower sucks up one hundred and forty-five pounds of water during its growth.

The number of persons employed in the mining of coal in England and Wales is eight hundred and twenty-five thousand four hundred and one.

The manufacture of artificial camphor by electrolysis is now assured.

In the schools of France one child in four, of both sexes, is a nail-biter.

One hundred and thirty kinds of wild flowers are found near Nome, Alaska.

Italy has 95,701 acres of orange and lemon groves containing 16,730,907 trees.

Ethiopia's railway being completed, Americans are exploiting that kingdom.

The twenty-seven railway-bridges on the Uganda (Africa) road are American.

The French domain in Africa comprises one third of the surface of the continent.

Windmills in Germany are now being used to produce power to drive electric motors.

Of the children of school age in Russia seventeen million are receiving no instruction.

There are eight hundred Chinese students in the colleges of Japan, and five hundred more are to be sent.

France spends thirty-five per cent of her resources on military preparations.

Upward of two hundred million gallons per annum of aërated waters are drunk in the United Kingdom.

In the colony of Japanese in New York City there are about one thousand men and but thirty women.

The receipts from passenger traffic are greater on Japan's railways than those from freight.

Russia's new naval program, to finish in 1906, is six battleships and three armored cruisers.

Moses lived exactly midway between the building of the pyramids, 5000 B.C., and our own day.

The average depth of the ocean between sixty degrees north and sixty degrees south is nearly three miles.

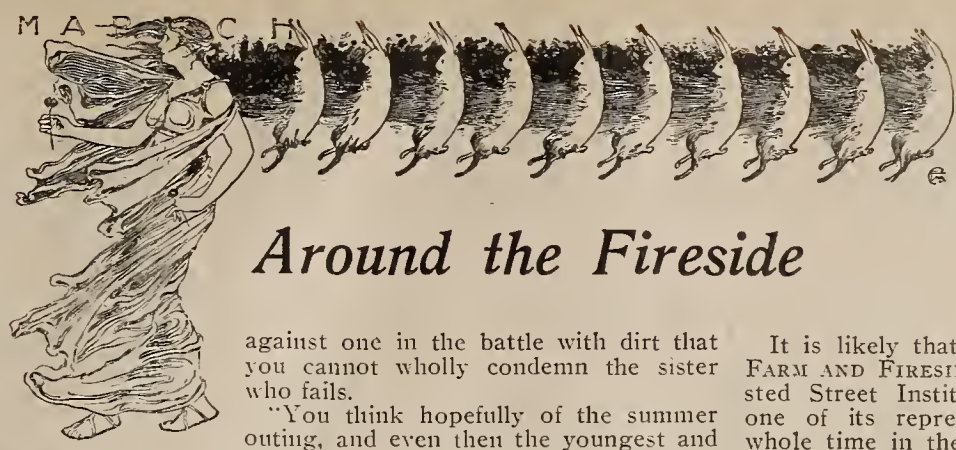
The most powerful automobile ever built is the Gobron-Brille racing-car, having one hundred and twenty horse-power.

CHRISTMAS FERN

In the last decade the increase in wealth was one seventh greater than the increase of population.

The maximum weight of the male brain is attained at the age of twenty years, and that of the female at seventeen years.—Woman's Magazine.

Spring and summer styles for 1904 are portrayed in our new Pattern Catalogue. Send for it to-day.



Around the Fireside

City Deserts and an Oasis

EVERY great city has its deserts; but in the midst of these deserts is often to be found an oasis. For almost forty years Halsted Street Institutional Church, Chicago, in the heart of what some one calls the city's "Bad Lands," has welcomed to its door of hope every desert wanderer. Past that door have shuffled the feet of representatives of no less than twenty-one distinct nationalities, all more, or less in need of food, of knowledge, of cheer, of uplift, of intellectual and spiritual light.

The peaceful dwellers in our smaller towns and villages may read and hear much of the city's problem in dealing with her ignorant and criminal classes, but no reading and no hearing can convey what is borne in upon the consciousness of one upon the ground who looks into the faces of the people to whom Halsted Street Church extends her strong, good hand.

The district in which this church is situated is not a "slum," but there is present the misery of incompetency, driving hosts of young people into the ranks of the underpaid, overworked unskilled laborer; there is the large family under the curse of the saloon — fathers and brothers spending wage and manhood for that which damns soul and body, while aged grandparents, wan mothers and tender sisters lock hands in an unequal struggle for bread.

"You enter," says one of the women workers of Halsted Mission in a recently published article, "a basement home so dark that it is some minutes before your unaccustomed eyes distinguish the faces of the family gathered curiously around. The air is close and foul. The older children are dirty and unkempt, the younger puny and listless. The windows are darkened by outside blinds, and further shaded within by shreds of soiled curtain. On the bare tables lies half a loaf of stale bread, with a knife and an empty cup or two. This and the tea-pot simmering on the stove suggest the irregular and unconventional character of the meals.

"'Oughtn't you to let Johnny go out of doors and get some color in his face?' you venture, taking the youngest to your lap.

"'Oh, no, I never let him go out; he is so delicate. He coughs, coughs, coughs, all night. I have to keep him in.'

"You observe the child's scanty clothing, and forbear to press the subject.

"'You could get more light with the blinds open,' you venture next; 'the children need sunshine to keep them well.' But the answer comes, 'We can't open the blinds. The boys will throw stones and break the windows.' The windows open directly on the narrow walk where scores of people pass, and just across, scarcely three feet away, rises the dingy wall of another building.

"Again you are silent; but as you glance shudderingly at the dark corners, and the door of the little windowless bedroom, you long to turn on a flood of sunlight, as Hercules turned the river into the Augean stables; but alas! you are not a Hercules. If you would suggest the superiority of home-made bread and fresh vegetables over the dry cakes and the stale baker's loaf, you must remember that fresh vegetables cost money, and that baking takes time and fuel, and the mother must wash or sew for the shops to eke out the family income. Besides, you may well be doubtful of the quality of bread manufactured under those conditions. Over all is the forbearing superiority of the woman who has 'brought up six children' just as her mother and her grandmother brought up hers. There are homes even here whose stairs and floors are scrubbed to snowy whiteness, and do credit to the brave housemother; but where the very air drips soot and the streets reek with foulness, the odds are so tremendously against one in the battle with dirt that you cannot wholly condemn the sister who fails.

"You think hopefully of the summer outing, and even then the youngest and sickliest child is the very one who must be kept at home, and his capricious appetite tempted with cheap candies and horrible confections."

Such are some of the conditions, barely outlined, that meet the workers in Halsted Street Church. And how are they met? What instruments have the Halsted Street Church workers for their work? A mission, called "The Open Door," is open every night in the year. Within eight blocks of its beacon-light are two hundred and fifteen thousand people, forty thousand of whom are young men for whom no other open door is set in that locality save the trap-door of the saloon. Seven days in the week a free kindergarten gives to little immortal blossoms breaths of pure atmosphere and glimpses of such heavenly sunshine as their crowded, dismal homes could never give. Every Saturday afternoon boys and girls take steps toward self-help in the boys' industrial school and girls' sewing-school. A splendidly equipped gymnasium is the means of many a lesson on the sacredness of the body, besides affording young life not only a harmless, but a beneficial, opportunity to "let off steam." A Penny Savings Bank is educating young penny spendthrifts in financial wisdom. Then the church-work proper: Sunday services, the Sunday-school of over a thousand children, the various religious meetings through the week for young and old.

REV. THOMAS K. GALE

The Rev. Thomas K. Gale is the pastor of this church, and in all the great city it would be hard to find a more energetic, hopeful, helpful friend than is Mr. Gale to his motley flock. With the same unhesitating quickstep the pastor goes day after day from pulpit to sick-bed, from gymnasium to house of mourning, from shops where he looks up his sheep to stuffy little kitchens and basement living-rooms, where he is ready—and able—to wash a baby's face, pray with a trembling drunkard, urge a tobacco-chewing lad to clean manliness or comfort an aged saint.

It is likely that many readers of the FARM AND FIRESIDE have heard of Halsted Street Institutional Church, since one of its representatives spends his whole time in the wide, sweet country, where good things are plenty and to spare, soliciting contributions to the supply department. From the store-rooms of the church there is a constant outgo of food and clothing to such as upon investigation are found worthy of relief.

Halsted Street people are not enlightened on household economics. Cheap coffee, tea, baker's bread, pork, and many times beer, whisky and tobacco, are their staples of consumption. These partaken of amid unattractive, unwholesome surroundings bring about low conditions of vitality and disease. What must it not mean to such as have known better things, and to others to whom the better things are a new and lovely revelation of this life's possibilities, to receive gifts of pure, rich canned fruits and jellies, fresh vegetables and eggs, cleanly cured bacon, etc., savoring of green fields and running brooks, and literally breathing forth the scent of "new-mown hay?"

Last summer small baskets of fresh plums in the city brought from thirty-five to fifty cents. Could that poor mother buy them when to this cost she must add sugar, fuel and the time to prepare them? Yet the writer personally knows of country people who paid to have plums carried out of their gardens! Quart baskets of blackberries—none too fresh—averaged sixteen cents each last summer. One man not far from Chicago plowed in almost the whole season's fruitage "because it did not pay to ship." On Halsted Street there are children who never even saw a blackberry.

It is out of such abundance as this that Halsted Street Church hopes to draw by the gifts of those who are so blessed, and if any reading this article has ever donated of his abundance to the unfortunate city children, he may know that the gift grew in value a thousandfold as it blessed the worthy recipients!

ADA MELVILLE SHAW.

A HALSTED-STREET FAMILY

New Trolley-Bridge

The transporter bridge being built across the Mersey at Liverpool resembles the ferry-suspension bridges at Portugal in Spain, the Seine bridge at Rouen, France, and the Bizerte bridge in Algiers. Its cost will be six hundred and fifty thousand dollars, or one third that of the ordinary bridge. It will cross the Mersey and the Ship Canal in one span of one thousand feet, this being the largest span of any bridge designed for road-traffic in the United Kingdom.

On both sides of the Mersey and Ship Canal huge steel towers, one hundred and ninety feet above high-water level, have been erected; between them will pass the ends of the two great girders, over one thousand feet in length, eighteen feet deep and thirty-five feet apart, brazed together horizontally. These take the place of the roadway in the ordinary suspension bridge, and in the transporter type are used for carrying the rails upon which runs the trolley, from which again is suspended, by steel-wire ropes, the transporter-car. The trolley, which will run on rails on the lower flange of the girders, will be about seventy-seven feet in length and thirty-five feet in width, and will be provided with thirty-two wheels.—The American Inventor.

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THE VALUE OF CHARCOAL

FEW PEOPLE KNOW HOW USEFUL IT IS IN PRESERVING HEALTH AND BEAUTY

Nearly everybody knows that charcoal is the safest and most efficient disinfectant and purifier in nature, but few realize its value when taken into the human system for the same cleansing purpose.

Charcoal is a remedy that the more you take of it the better; it is not a drug at all, but simply absorbs the gases and impurities always present in the stomach and intestines, and carries them out of the system.

Charcoal sweetens the breath after smoking, drinking, or after eating onions and other odorous vegetables.

Charcoal effectually clears and improves the complexion, it whitens the teeth, and further acts as a natural and eminently safe cathartic.

It absorbs the injurious gases which collect in the stomach and bowels; it disinfects the mouth and throat from the poison of catarrh.

All druggists sell charcoal in one form or another, but probably the best charcoal and the most for the money is in Stuart's Absorbent Lozenges; they are composed of the finest powdered Willow Charcoal, and other harmless antiseptics in tablet form, or rather in the form of large, pleasant-tasting lozenges, the charcoal being mixed with honey.

The daily use of these lozenges will soon tell in a much improved condition of the general health, better complexion, sweeter breath and purer blood, and the beauty of it is that no possible harm can result from their continued use, but, on the contrary, great benefit.

A Buffalo physician, in speaking of the benefits of charcoal, says: "I advise Stuart's Absorbent Lozenges to all patients suffering from gas in stomach and bowels, and to clear the complexion and purify the breath, mouth and throat; I also believe the liver is greatly benefited by the daily use of them; they cost but twenty-five cents a box at drug-stores, and although in some sense a patent preparation, yet I believe I get more and better charcoal in Stuart's Absorbent Lozenges than in any of the ordinary charcoal tablets."

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The J. B. Williams Co., Glastonbury, Ct.

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PATENTS No attorney's fee until patent is allowed. Write for Inventor's Guide. FRANKLIN H. HOUGH, Atlantic Building, Washington, D. C.

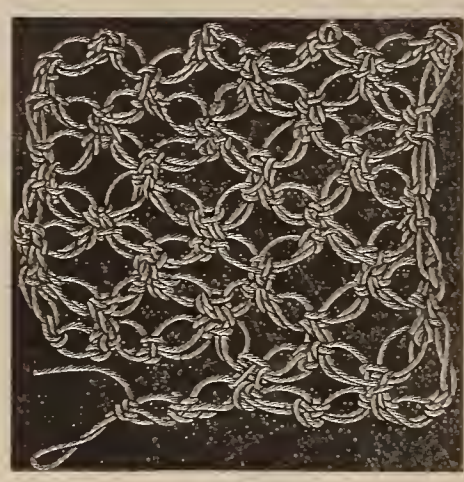
The Housewife

Knot-Stitch

MAKE a chain-stitch, draw out the loop about one fourth of an inch, catch the thread, and draw through. Put the needle between the loop that was drawn out first and the thread just pulled through, and draw through again, making a single crochet and also the knot-stitch. Make one chain-stitch, draw out the loop, and proceed as before. Repeat this for the chain of knots to make several rows. Turn at the end of the row, and single crochet in the fifth knot from the needle; then make one chain-stitch, two knot-stitches, and fasten on the second knot with a single crochet. Make one chain-stitch, draw out the loop, and repeat across the row. M. W.

A Work-Apron

This little work-apron is made of men's hemstitched cotton handkerchiefs. A large white handkerchief forms the apron, and two colored-border handkerchiefs are used in the flounce. The flounce is shaped by cutting circular pieces from the centers of the handkerchiefs, and is gathered and stitched on the apron. A third bordered handkerchief is necessary to make the pocket and ties.



KNOT-STITCH

Drawn-Work Handkerchief

"A friend in need is a friend indeed." This may be said of the handkerchief, for a lady cannot do without handkerchiefs nor have too many. Among the most popular are those done in drawn-work, of which a neat design is given in the illustration. Take a piece of linen as large as you want your handkerchief, draw threads, and hemstitch. Draw out one half inch of threads, leave one eighth of an inch of linen, thus dividing into squares, and so on until you have as many squares as desired. Hemstitch each square, fill in and work the centers into wheels with spokes and pyramid stitches or the common spider-web. When finished it makes a very neat handkerchief. A dainty lace may be sewn around the edge if desired. O. M.

Turn-Over Collar

A pretty turn-over collar is made thus: Take a piece of linen about four inches square, draw out one half inch of threads, leave one eighth of an inch of linen, and so on until you have several rows. Draw from the other side in the same way, thus dividing the linen into squares. Fill in the squares with a spider-web or any neat design. Cut from corner to corner, draw your threads, and hemstitch. Attach to neat band. This makes a very pretty and inexpensive turnover. O. M.

Lap-Bag for Fancy-Work

One large mercerized handkerchief of pretty color and design is selected for this article. Fold one third over, and by overcasting the ends a pocket is formed to hold materials. On the other third attach ribbons of same color as that predominating in the handkerchief for needles, scissors, bodkin, etc. On one corner a pinked double piece of flannel serves to hold loose needles. This very useful article serves two purposes—a protector to the work and to the lap. Quickly folded with contents intact, it can safely be laid down, and taken up at leisure, and laundered when necessary. An apron of this kind is invaluable when one must jump up frequently to attend to her various household duties.

HEISTER ELLIOTT.

"Will You Have a Cup de Blé?"

Those who desire to relieve the nerves as well as the pocketbook from unnecessary strain will find the following recipe valuable:

Take wheat, carefully selected, and as well cleaned by mechanical screening as if for particular seed-sowing, wash it in warm water several times, drain, and at once put into a large oven-pan; roast it to a light

HANDKERCHIEF WORK-APRON

brown, or cinnamon, color, or until it grinds easily. Allow a heaping tablespoonful of the cereal for each individual, regulating the strength as desired. Put the desired amount in a cheese-cloth bag, and boil fifteen or twenty minutes (thorough boiling is requisite, keeping the stage of water in the pot up to the amount of decoction needed when finished).

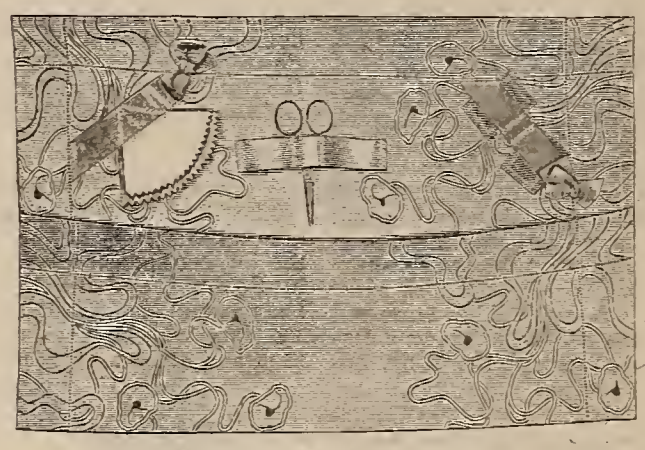
Now, with sugar and cream (or boiled milk) of superior grade, you have a cup fit—not "for the gods," who easily secure health and happiness more airily, but for children, whose nerve-centers cannot be built too solidly; for ladies, who seek the complexion which captivates; for men, whose "hankerings" are well regulated rather than morbid.

Concerning the benefit or injury—as the case may be to the individual—incident to the use of tea and coffee, it appears to be the concensus of able opinion that while these do good under certain conditions, they otherwise do much harm. Some physicians say that coffee is anti-malarial; that it is especially helpful to those who are exposed to bad weather and poisonous night air—as soldiers, for instance. On the other hand, the "coffee-heart," "coffee poisoning," etc., seem well established in both theory and fact. Tea is said to contain an element which prevents the waste of tissue in elderly or aged people, but it is declared to be injurious to the digestion of many. Those in high authority assert that "nerves need no stimulus but good nutrition."

Those who use the wholesome cereal preparations certainly do escape the adulterations which are found in many specimens of tea and coffee. Besides the fraudulent substitution, and the dirt which may be classified as merely unwholesome, there are coloring and glazing mixtures, and still other features which convey positive injury and often bring on permanent disorders.

The writer has used wheat steadily for years with results most gratifying. It is something more than a mere substitute—it has become the real thing itself.

It is doubtless true that nothing conforms equally well to the needs of all organizations; nothing is equally injurious to all persons—a fact behind which many people develop (if they do not hide) their weaknesses. At any rate, the cereal drinks are remarkably economical if home-made, and are nutritious and generally satisfying to normal appetites. Barley or rye may be used, wholly or blended with wheat, with very pleasing and satisfactory results.



LAP-BAG FOR FANCY-WORK

Do not call the decoction "coffee," nor by any name given by the manufacturer of high-priced cereals. Originate a euphonious name to suit yourself. The Latin name for winter wheat is "triticum libernum;" the French call wheat "blé" (pronounced blay). We are not at this moment prepared to give the Italian; possibly you may be able, while grinding the grain, to obtain information through telepathic communication with a sympathetic organ-grinder. MRS. R.

Lenten Dainties

CHEESE FONDU.—Two scant cupfuls of milk, one cupful of cracker-crumbs, two well-beaten eggs, one tablespoonful of melted butter, two cupfuls of grated cheese and seasoning to taste. Mix well together, put in a buttered baking-dish, and bake to a pale brown in a quick oven. Serve in the dish in which it was baked, as it falls quickly. Pin a white napkin around the dish if the usual outside dish is not at hand.

CODFISH-BALLS.—Shred up enough firm white codfish to fill a pint bowl. Peel one and one half dozen rather small potatoes, and leave them in cold water over night. Put the codfish to soak with the potatoes. In the morning put the mixed potatoes and fish on the fire to cook with plenty of boiling water. When done, drain thoroughly, and mash quickly until every lump is gone. Add a large tablespoonful of butter, beating it in well with a spoon, then add two well-beaten eggs, stirring them in quickly and lightly, and mold while hot into oblong balls. Fry them for three minutes in sufficient boiling fat to cover them, then drain on brown paper. Place on a heated platter, and serve at once. This is a delicious breakfast-dish at any time. The secret of good fish-balls is to have the fish and potatoes thoroughly mixed.

EGG-BALLS.—Boil six eggs for twenty minutes, drop them in cold water for ten minutes, then remove the shells. Take out the yolks, mash them smooth in a bowl, then add a dessert-spoonful of soft butter, a few drops of onion-juice, three fourths of a teaspoonful of salt, half a teaspoonful of lemon-juice and the well-whipped whites of two eggs. Form into small balls, and fry in hot butter. Cut out rounds of nicely buttered hot toast, garnish with the hard-boiled whites of the eggs cut in thin rings, sprinkle with salt and little bits of butter, put two or three egg-balls in the center of each, and set in a hot oven for one minute. Serve at once. These are very nice for breakfast.

EGGS IN POTATO NESTS.—Cold mashed potatoes may be used for this dish. They should be well seasoned, then add a little hot cream and the yolk of one egg to each cupful of potatoes to soften them. Whip them very light with a fork, add the stiffly whipped whites of the eggs, and heap in a mound in a well-buttered baking-dish. Take a clean egg, and make little cup-shaped hollows in the potato mound, drop a raw egg in each, dust with salt and white pepper, cover with little bits of butter, and cook in a hot oven until the eggs are like poached. Serve at once. These are very nice.

POTATO OMELET.—Peel four medium-sized potatoes, and cook quickly in boiling water until tender. Drain, mash until smooth and light, add a large tablespoonful of butter, half a teaspoonful of minced onion, half a teaspoonful of minced parsley, two well-beaten eggs, one cupful of hot milk and a teaspoonful of salt. Beat all together with a fork. Melt a tablespoonful of but-

DRAWN-WORK TURNOVER

ter in a frying-pan, and press the potato through a colander into the hot pan, smoothing the surface over lightly. Cover the pan, and cook until the omelet is a light brown, then fold over, turn out on a dish, and serve at once.

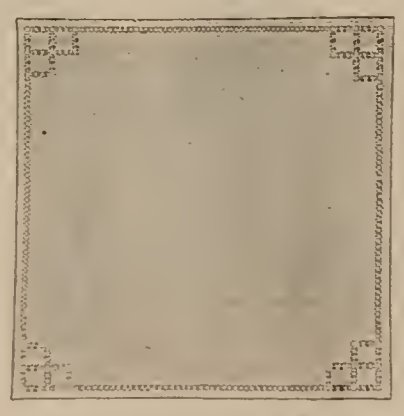
LOBSTER CUTLETS.—Two cupfuls of lobster-meat (canned will do), two tablespoonfuls of flour, one tablespoonful of chopped parsley, three fourths of a cupful of cream or milk, one tablespoonful of butter and the yolks of two eggs. Chop the fish with a silver knife into small pieces, and add the seasoning. Rub the butter and flour to a smooth paste, add the milk (heated to boiling-point), and stir over the fire until it is a thick, smooth sauce; then add the beaten yolks of the eggs, and cook one minute longer, but do not let it boil. Add the lobster to this sauce, and set it aside to cool. When cold, form into balls, dip first in beaten egg, then in bread-crumbs, and fry in hot butter. Drain on brown paper, put in a heated dish, garnish with lemon, and serve at once.

FISH-CAKES.—Take the remains of any cold cooked fish, and shred finely, removing skin and bones. Add an equal quantity of potatoes mashed through a sieve, and to each pound of fish and potatoes add two well-beaten eggs. Then add one dessert-spoonful of flour, plenty of seasoning, and just enough milk to make a paste that may be beaten—it must not be too thin. Drop by spoonfuls in smoking hot oil or fat, and fry to a delicate brown. These are nice for breakfast or lunch.

LUCANIAN EGGS.—Cut five hard-boiled eggs in eighths lengthwise, add one cupful of cooked macaroni, one half cupful of grated cheese and one and three fourths cupfuls of cream sauce. Season with salt, paprika and onion-juice. Put in a buttered baking-dish, cover with buttered crumbs, and bake until the crumbs are brown.

WHITE-CAP OMELET.—Beat the whites of three eggs until so stiff they will not drop from an inverted bowl, add one third of this to the yolks, beat thoroughly, and season to taste with salt and pepper. Have ready a hot frying-pan in which has been melted a tablespoonful of butter, pour in the yolk-mixture, spreading it over the pan, and then spread the whites over the yolks. As soon as the bottom is lightly browned, set in a hot oven for one minute. Take out, and serve immediately.

HALIBUT A LA GERMAN.—Wash and wipe dry a halibut steak two inches thick. Melt a spoonful of butter in a dripping-pan, sprinkle with minced onion, salt and pepper, lay the fish on top, cover with the yolk of an egg, sprinkle with more chopped onion, parsley and seasoning. Pour over it a teaspoonful of lemon-juice, cover with bits of butter, and bake in a moderate oven for half an hour. Serve with cream sauce, and garnish with parsley and sliced lemon.



DRAWN-WORK HANDKERCHIEF

FISH-TRUFFLE.—Pound to a paste one small cupful of any cold cooked fish. Mix with it a cupful of milk, four well-beaten eggs and seasoning to taste. Pour this mixture in a buttered mold, cover, and steam for half an hour. Turn out on a hot buttered dish, and pour a rich cream sauce around it. Serve at once, or it will fall.

MARY FOSTER SNIDER.

Flour-Sack Aprons

Flour-sacks in the larger sizes make nice aprons. An unbleached one was trimmed with crocheted lace, and the owner was amused over the admiration excited by her "linen" apron. A kimono was made from these sacks, and trimmed with red oil calico. The girl who wore it was getting ready to be married, and one of "his" relatives, seeing her for the first time in this, said she fell in love with the bride, too. MAY MYRTLE FRENCH.

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that is helping FARM AND FIRESIDE reach a million subscribers. All our readers are becoming interested. Stop and think! Just one subscriber at twenty-five cents from each reader, and FARM AND FIRESIDE has a million! Will each reader kindly do his share? Get your neighbor to take FARM AND FIRESIDE, that's all.

The Housewife

The House Beautiful*

No matter how limited our means, nothing but the direst poverty need prevent us from making of our home a house beautiful. There is a beauty and a grace and a dignity in a home furnished with artistic simplicity which can never be attained by an accumulation of showy furnishings, whether they be cheap and tawdry or rich and expensive. A parlor, a drawing-room or a living-room whose interior resembles nothing so much as a store-room for the salvage of a wrecked furniture-store is neither artistic nor beautiful, to say nothing of being a restful place for ordinary people—it makes them weary instead.

Yet it cannot be denied that the average woman is a slave to her furniture and to the accumulation of useless rubbish which she dignifies by the name of "bric-à-brac." It is the care of these furnishings and

A PEEP INTO AN ARTISTIC DINING-ROOM

dust-catching abominations, which are neither useful nor ornamental, that reduces so many women to the verge of nervous prostration.

I believe that one great reason for all this overfurnishing and striving after show-room effects is that but few women have the courage to assert their individuality and simplify their furnishings with an eye single to beauty and utility. Many a woman who despises her overfurnished, garish rooms has not the courage of her convictions to simplify, for fear that she may be thought odd or mean, or that her simplicity may be mistaken for poverty. But better a thousand times poverty, with a sweet and restful simplicity, than a showy, overfurnished home bedecked with cheap and tawdry ornaments which do not ornament, and a woman with wrecked nerves and dissatisfied mind.

We should furnish our rooms with an eye to comfort and utility and artistic beauty, and not to the opinions of our acquaintances. One chair or table that is solid and durable and built upon plain and simple lines of beauty and utility is worth a dozen carved and curlicued affairs made for show instead of use. A couch covered with plain, honest denim that is comfortable and not too good for the use of the family is far better than a showy sham that pretends to be velvet, but is really nothing better than cotton velour. A few really fine black-and-white etchings and one or two reproductions of fine pictures in simple frames are really more soul-satisfying than a whole roomful of garish, gilt-framed show-pieces.

It is not quantity, but quality, which lifts the furnishings of our rooms from the plane of the commonplace to the artistic and the ideal. We may crowd our rooms with a heterogeneous lot of furnishings; we may fill in all the nooks and corners with cushions and pillows and hassocks and divans; we may hang gimcracks innumerable upon every available projection, and cover our walls with calendars and posters and our floors with rugs, and then we may wear ourselves to a frazzle keeping all this useless rubbish in order. In addition we shall miss all the restfulness and artistic beauty of the rooms of the woman who dares to assert her individuality in her home by furnishing it simply and plainly with an eye to the comfort of her family.

Say what we will, every woman does stamp her individuality upon her home, and the home leaves its impress upon those who are reared within its walls—yes, and upon the occasional observing "stranger within the gates." In homes of real refinement the inmates are unaffected, refined and genuine. In homes where comfort and artistic simplicity take the place of show-room display there is peace and harmony and repose, and those who dwell therein know the meaning of home life in its true and highest sense; and best of all, in such homes the home-maker is the complete mistress of herself and her house, with leisure in which to participate in the simple joys and pleasures of domestic life, instead of being a slave to her bric-à-brac and overfurnishing.

Mrs. Clarke Hardy.

*The pictures illustrating the article entitled "The House Beautiful" are photographic reproductions of portions of the residence of Mr. Warren J. Donham, who has been a successful farmer in Clermont County, Ohio, for many years.

Window-Curtains and Other Draperies

Summer draperies are loveliest when of sheer material which gives an impression of freely circulating air. They should be arranged to hang in simple, natural lines, or else be looped very daintily with cotton cords or satin ribbons, having full bows at the front—visible from an exterior as well as an interior point of view. These cords with tassels may be made at home by twisting together strands of heavy cotton.

One pretty parlor-window has sash-curtains of cable net hung from the inside of the frame on a rod (a copper wire suspended in three blind-staples, or double-pointed tacks). The material hangs slightly full, and it is finished with narrow lace edging. These curtains are loosely caught back one fourth of their length above the window-sill. Additional curtains of a sort of fish-net hang straight down, just escaping the floor. An old-fashioned brass cornice is here utilized as a support instead of a pole. Where ceilings are high, it is quite customary for the curtains to end immediately below the woodwork of the window.

Another pretty drapery, and very simple, is of bobbinet, having a full four-inch frill on the front and lower edges. It hangs from a thin brass pole which runs through the top hem, and is caught back on either side by an amply long cord, which is held at the back by a small brass cup-hook.

White swiss with insertion and lace or frill finish is always pretty. In connection with sash drapery of this fabric, curtains of blue-and-white Japanese cotton crêpe pushed well toward the ends of the pole, falling in straight lines, are an artistic addition to certain apartments. Japanese crêpe, which can be had in various colors, is very good to use for cabinet or bookcase hangings; so also are silkolene art cambric and art ticking or silk damask. Thin brass rods with socket fittings are best for such uses.

In a doorway a narrow grille of white or natural wood above curtains of this Japanese fabric in blue and white gives a delightful effect.

Another window idea suitable for wide openings consists of a twelve-inch frilled lambrequin, with long curtains drawn very widely apart from the center. This treatment is effective carried out in swiss or in flowered dimity, a charming design being pink flowers and a delicate green vine upon white. A similar lambrequin makes an attractive finish for a mantel.

PORTION OF SITTING-ROOM

One room which is greatly admired has its hangings, including a valance for the plain bed, of print—a white ground with a green vine for its ornamentation. Green matting covers the floor, and green crêpe cushions, for beauty and use, abundantly decorate a plain window-seat. The curtains here depend from a brass rod across the middle of the window, the upper half of which is filled in with a lattice of slender slats painted grayish green. Old pink china bowls and black iron candlesticks are well displayed upon the mantel, which has a narrow green panel above it. The table-cover—a plain square of cotton print, Oriental in pattern, with dashes of red and dark blue in it—corresponds in color with the small rugs, giving character to the room, which would otherwise be monotonous. A dining-room could be similarly developed.

Bandana handkerchiefs in palm-leaf designs rival the more expensive imported printed cottons, and for pillow-covers and table squares are admirable.

Where heavier portières are desired, tapestry is satisfactory if well chosen. Blendings of écru and brown go well with a variety of color-schemes. French jutes, which come by the yard, are also good. One effective piece has a damask finish, and is old pink, with a Colonial wreath design in cream color. Another has écru fleur-de-lis on an olive ground. It is quite heavy and suitable for doorways.

Abigail Singleton Donham.

CORNER OF YOUNG LADY'S BEDROOM

Memories of the Old Farm

Not long ago a friend of mine, knowing my love of Nature, sent me a sofa-pillow filled with white-clover blossoms and leaves. The cover is very simple and inexpensive, and would not be selected for its beauty from a number of others with which it nestles; yet I would not part with that pillow for all the others, not merely for the donor's sake, either, although I prize it highly because of the loving one who made it. To me it is as a breath of the country's summer wafted over the smoke and houses and crowded streets of the city. I can lay my head on its fragrant bosom, and dream of sweet fields and sunny meadows; the fragrance of new-mown hay floats around me. I see the wild woodland beyond, and a silvery gleam comes to me from its edge, where the sun is kissing a winding creek good-night. Somewhere in the distance the cows are coming home, for I hear their faint lowing. I look around. There, not far away, stands the old house, weather-beaten and worn, yet stanch and kindly-looking. About it are the old familiar trees, and in front stretches the road with its tiny streak of grass in the center and wide ones on either side. Did I ever pass along that road, I wonder? It seems I have always dreamed here in the clover.

And the dear old orchard! How memory clings and twines itself about it! Was there ever one like it? Ever such soft, green grass, such gently waving trees, such large, luscious apples? How smooth and even the closely trimmed hedge was. Surely the fairies could have no more suitable promenade than those glossy, overlapping leaves. What softer, downier bed could they want than that luxuriant grass? And then, in one corner was the throne—the bough laden with branches which God must certainly have bent down on purpose. How long it had lain there I do not know. Perhaps the fairies could tell you. Its brown coat was covered with the daintiest embroidery, all of green, velvety moss. To sit enthroned thereon and see the red and gold of the setting sun vanish slowly, to feel the quiet peacefulness of the summer twilight, was worth far more to me than steeping myself in the glory of some old master. And then to watch the stars—"the forget-me-nots of the angels"—peeping out shyly here and there from behind their fast-darkening curtain, gaining courage as their numbers increased, until in every direction they dotted the sky like dandelions in a meadow on a summer morning. How many happy evenings I have spent wandering in and out among those dear old trees, whose shadows played about me lovingly, caressingly. Far from the noisy clamor, the wildly jostling crowd, of the city, what peace, what rest, to be alone with Nature, to be free to dream and hope!

Mae Y. Mahaffy.

A New Belt

A folded belt of the same material as the bodice is always preferable for the stout woman, especially if the color of the garment is light. A few French knots scattered over the material before it is fastened to the stiffened foundation will change a very commonplace affair into a very dainty one. The knots may be worked with silk of the same or a contrasting shade or black, according to the material used, the occasions on which it will probably be worn, and the age of the wearer. French knots give an air of richness and elegance to the plainest article of dress.

Inez Redding.

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Selections

Foreboding

BY J. EDMUND V. COOKE

I should be so lonely without you, dear.
Why, even now, if you be not here
For the shortest day, there's a certain lack
Which does not vanish till you come back.
And if you were gone forever, dear,
The aching throat and the hot, swift tear
Were a feeble vent and a futile due
To the aching absence, dear, of you.

I should be so lonely without you, dear.
Kiss me again, so I'll know you're near!
Ah, should I reach for the old embrace,
And my arms should close on a formless space!
In the midst of the world and its hollow cheer,
In the gayest throng, I should thrill with fear—
The fear of the void which the world would be
If you were gone from the earth and me.

I should be so lonely without you, dear.
Though I still might heed the passing year,
Though I still might toil from sun to sun,
What would it be when the work were done?
You should not see, and your could not share.
And who, of the rest, would really care?
And if I were gone, and 'twere you were left,
I know your breast were as much bereft;
And if I were away while you were here,
Though God were good and the serapns near,
I should still be lonely without you, dear.

(It may be of interest to the reader to know that Mr. Cooke wrote the foregoing stanzas at the bedside of his sick mother, whose life was despaired of. Mrs. Cooke recovered, however, and is living with her talented son, whose pen pays her such an eloquent tribute.)

Novel Way to Study Bees

THE city dweller, longing for the time when he can exchange heated pavements for the yielding turf of the meadow, carves a dainty "section" of comb-honey at his tea-table, and thinks, "If we ever get out on a farm, one of the first things that I buy will be a hive of bees." Little does he realize that in all probability he could keep a hive of bees right where he now lives.

The observation hive, with its glass sides, makes it possible for him to lay the foundation of commercial bee-keeping by studying the life-history and habits of the bee. Several extensive apiaries have been maintained upon the tops of buildings in New York and elsewhere.—Country Life in America.

The Electric Locomotive

Electricity is rapidly becoming a formidable rival of steam as a motive power in all parts of the world; instance the trolley-car, now a national institution. The electric locomotive, for tunnel and mining purposes especially, has removed many obstacles, affording a cheap and clean power for traction, and also rendering the problem of ventilation a comparatively easy matter.

At the General Electric Company's works at Schenectady, N. Y., a new electric locomotive has been built for the Baltimore & Ohio Railroad Company for use in the tunnel under the city of Baltimore. They have had one in service for several years at the same place, but found it too small for the work required of it, and the result was the order for a more powerful locomotive. The new one is a massive machine weighing one hundred and eighty tons. It is larger, stronger and heavier than any steam locomotive ever built in any country. It develops two thousand horse-power, a power that is capable of hauling a load of fifteen thousand tons up a one-and-one-half-per-cent grade.

The steam locomotive is built as a unit which cannot be added to except by coupling two engines together. The electric locomotive, however, can have its units increased at will, thereby increasing its power. The new locomotive for the Baltimore and Ohio Railroad is composed in its present form of two units, or in other words, of two engines, joined together and operated as one from a central point. As the electric locomotive is equipped with sixteen driving-wheels, the traction is very great. All details are beautifully worked out, and the framework is very massive.

The company building the machine has the largest plant of its kind in the world. Its working-force in Schenectady consists of eleven thousand skilled workmen, constituting about one third of the population of the city. The company also has large factories in Lynn, Mass., and the largest incandescent-lamp factory in the world at Harrison, N. Y. One feature of the large workshop at Schenectady is very striking—the practice of taking the machine-tool to the work instead of the work to the tool. This is accomplished by means of a powerful traveling-crane. When the tool is located to the satisfaction of the workman, it is bolted to the slotted steel floor, and the current turned on to the motor which is a part of the tool. This method of working is only used, however, on large pieces of work. —C. M. Lewis, in American Inventor.

Nature and Science

SUBSTITUTE FOR CORK.—Notwithstanding all the achievements of practical science, there are some indispensable materials the making of which is still Nature's secret, and for which no entirely successful substitute has been found. Among these substances is cork. It is possible, however, as Consul-General Hughes at Coburg, Germany, has just pointed out, that Nature herself in this case offers us a substitute in the wood of a tree growing on the east coast of Lake Tchad, in Africa, which is of even less specific gravity than cork.

WHY THUNDER IS SO LOUD.—Prof. John Trowbridge of Harvard University says that some recent experiments he has made in the Jefferson Physical Laboratory show that "the astounding noise of a lightning discharge is largely due to the dissociation of water-vapor," through the explosion of the hydrogen and oxygen gases produced by such dissociation. In his mimic-lightning experiments Professor Trowbridge produced a torrent of huge electric sparks. The noise of the discharge was so great that the operator had to stop his ears with cotton and then wrap a heavy cloth around them.

BUTTER FROM SIBERIA.—Siberia so long stretched before the imagination of the world as a land of snow and desolation that even now, when the trans-Siberian Railway has been built, and when the productiveness of that vast country is beginning to be understood, one is rather surprised to hear that more than ten million dollars' worth of butter is annually exported from Siberia. Its great plains afford good grazing, and within three years after the railway was opened one thousand butter-manufactories were erected. The government has now undertaken to furnish free instruction on a large scale in dairying and butter-making.

A MACHINE WITH FINGERS.—Among the exhibits intended for the St. Louis World's Fair is a device for feeding and removing sheets to and from a platen job-printing press, which is described as a startlingly uncanny machine. It consists of two arms, which possess a reaching and retracting movement resembling that of a human arm, and each of which terminates in five long, crooked fingers, the grasping power of which depends upon an automatic suction-force in the finger-tips. The arms work alternately; one delivers the blank sheets, and the other removes them as they are printed, and deposits them on a platform.

NEW LIFE-SAVING DEVICE.—A French inventor, Drouillard, has contrived a "drifter balloon-float" for carrying a rope to a ship in distress, or from the ship to the shore. The "balloon," which floats on the water, can be folded up like an accordion when not in use. It is not filled with gas. The only object of expanding it, which is done mechanically, is to make it float easily. By means of the action of the wind on its surfaces, which can be set at particular angles like sails, it may be caused to travel in the desired direction. It drags along a timber float, carrying the rope, and provided with loops to which drowning persons may cling in an emergency. Trials on the French coast have shown its practicability.—Youth's Companion.

How About It?

Have you decided to send just one new subscription to FARM AND FIRESIDE to help build up its subscription list? If you have not already sent in the name, please do so now. Our friends and subscribers are responding in goodly numbers. Won't you help a little by sending in the subscription of a friend?

Sunday Reading

"Don't"

BY LIDA KECK-WIGGINS

Don't get discouraged when you hear
What people say about you;
Don't get the blues and drop a tear
Because they chance to doubt you.

Don't go around with troubled brow,
O'erlooking all life's beauty;
The folks that talk will suffer more
Than you, so do your duty!

Don't fret and fume and wish them ill—
Their lives hold little pleasure;
Send back a message of good-will—
'Twill serve to heap your measure.

Don't be discouraged, for the world
Will always criticize you;
Earth's dearest treasure is the few
True friends who love and prize you.

Mother's Love

THE preference of motherhood is generally based on an instinct which tends to protect the one whom others do not favor—not only the weak and feeble, but the bad and worthless. It is better that the mother's heart, erring in its judgment and hoping against hope to the end, should still go on loving and condoning, pitying and sustaining, where none other can and will; for there will always be plenty to bear hardly upon the sinner, while endless compassion and undying love are seldom found in this world outside a mother's heart. Many an erring one can vouch for the truth of this maternal instinct. Many a man has been rescued and brought back to manhood and good citizenship who, without the tender, pitying compassion and sustaining force of a mother's love, would have been lost.—Boston Traveler.

The Sermon that is After a Soul

The sermon that is after a soul is, like the Master, "filled with compassion." It will have in it what was in Christ's eyes when he looked on Peter, with the curses and denials scarce off that poor disciple's lips. It will have in it what was in Christ's voice when he stood weeping over Jerusalem, and said, "How oft would I have gathered thy children together, as a hen gathereth her brood under her wings, and ye would not." The severest rebuke will get its chief severity from the deep undertone of divine compassion; and whether it be warning or entreaty, command or invitation, the terrors of the law or the forgiveness of the gospel, the pathos of a suffering and beseeching and pursuing love will bathe it all and make it clear that if the sermon does not bring the prodigal home it will be because he preferred to trample on his father's heart and murder mercy.

Brethren of the ministry, what are sermons to "the times" compared with sermons to the eternities? Sermons of instruction are indeed priceless; but the gospel is not simply food for saints. It is a cry of alarm. It is a word of rescue. It is a call to repentance. If sinners are not brought to Christ, how can they be built up in Christ? Let it never be forgotten that souls are before us every Sabbath—sinful, unsaved, perishing, lost souls. Men of God, "throw out the lifeline."—Herrick Johnson.

Our One Little Talent

What shall we do with it? Why, use it, of course. What was it given us for? Not to fold away in a napkin, surely.

What's that you say? "It is small, and of little worth?" Then the more reason that it should be used assiduously, that it may increase tenfold. These ten-talented people can perhaps afford to take things somewhat easy, as their possessions are abundant to start with; but we who have but the single talent must use it constantly, lest it become buried, or shrivel up and blow away.

God does not expect us to do great things with our talent; he only expects us to do each little thing faithfully and well. It takes us so long to learn that God does not look at things as we do, and call some large, others small. We sometimes forget that "ye nexte thing"—that unimportant task, that arduous duty, that trivial deed of kindness, that message from the heart—is just what God has placed in our pathway, is just what he wants us to do.

Oh, yes, I know many times we do not want to stop for this "next thing"—we want to hasten ahead, and accomplish something worth while. Then we wonder why it is that our lives are so unsatisfactory and fruitless. It is not so much what we do, but how we do it and for whom we do it, that counts. We want to work for Christ; then he will work in us this priceless thing we call character. And all of our labor will be glorified because we are doing it for him.

There is a fable of a great magnetic rock which would take the nails out of all the vessels that sailed near it; there could be but one result—the vessel would soon fall to pieces for want of those little, seemingly unimportant instruments for holding it together. Many a man who possessed great ability, and who might have wielded a powerful influence, has become a castaway, a wreck, because he allowed the temptations and allurements of this world to draw the nails from his character, the bolts from his religious belief. Men with but few talents have been just as careless with them. They have looked upon them as theirs in fee simple, and have used them according to their own sweet will; they have not placed them in God's hands to be builded into their characters firmly and strongly. They used their talents, but it was a misuse.

If we would use our talent as God designs we should, we will admit that we have it, then commit it into Christ's keeping, and submit it to all the developing that he sees fit to subject it; after which we will transmit as much as possible of it to others. Admit, commit, submit and transmit. Probably the most difficult of all these "mits"—these givings, these sendings—is the third. There is something in our nature that seems to object to the little prefix "sub," but our nature will be changed when we take his nature upon us. Then we shall be glad that our poor little talent can be under his direction and guidance. We will be thankful that he so loves us that we will do his bidding. He can take it and make something out of it; he will show us where to invest it to the best advantage; he will enable us so to use it in our common, every-day lives that in some way it will grow by his grace. If we walk softly by his side, listening intently to his voice, he will mark out our pathway for us, and will enable us to use, but not abuse, our talent. ELLA BARTLETT SIMMONS.

If Christ Came to Our Town

Should I be glad to see him?
Where should I wish him to find me?
What work now being done would he commend?
What neglect would he condemn?
What business would he disapprove?
With whom would he spend most of his time?
What claims would he make?
What changes would I make in my life if I had twenty-four hours' notice of his coming?
How would he be received?
What work would he begin?—Baltimore and Richmond Church Advocate.

Our Own Faults

Let us not be overcurious about the failings of others, but take account of our own; let us bear in mind the excellencies of other men, while we reckon up our own faults, for then shall we be well-pleasing to God. For he who looks at the faults of others and at his own excellencies is injured in two ways—by the latter he is carried up to arrogance, and through the former he falls into listlessness. For when he perceives that such a one hath sinned, very easily he will sin himself; when he perceives he hath in aught excelled, very easily he becometh arrogant. He who consigns to oblivion his own excellencies, and looks at his failings only, whilst he is a curious engineer of the excellencies, not the sins, of others, is profitable in many ways. And how? I will tell you. When he sees that such a one hath done excellently, he is raised to emulate the same; when he sees that he himself hath sinned, he is rendered humble and modest. If we act thus, if we thus regulate ourselves, we shall be able to obtain the good things which we are promised through the loving kindness of our Lord Jesus Christ.—Chrysostom.

The Old Family Favorite

In our announcements in last issue of FARM AND FIRESIDE we asked the members of our FARM AND FIRESIDE family to assist us in getting a million subscribers for FARM AND FIRESIDE. The response to our request has indeed been very liberal, and we want to thank every one who has already lent their assistance. Now, we all want to continue this good work, and keep it up, and the million-mark will be reached. And let every member of this big family each contribute just one subscription. You can easily get a friend or neighbor to give you the twenty-five cents for a year's subscription to FARM AND FIRESIDE. Just think for a moment if every reader would help just a little how the old family favorite, FARM AND FIRESIDE, would bound upward. Won't you please send that one new subscriber? Thank you.

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WOMEN suffer untold misery because the nature of their disease is not always correctly understood; in many cases when doctoring, they are led to believe that womb trouble or female weakness of some sort is responsible for their ills, when in fact disordered kidneys are the chief cause of their distressing troubles. Perhaps you suffer almost continually with pain in the back, bearing-down feelings, headache and utter exhaustion.

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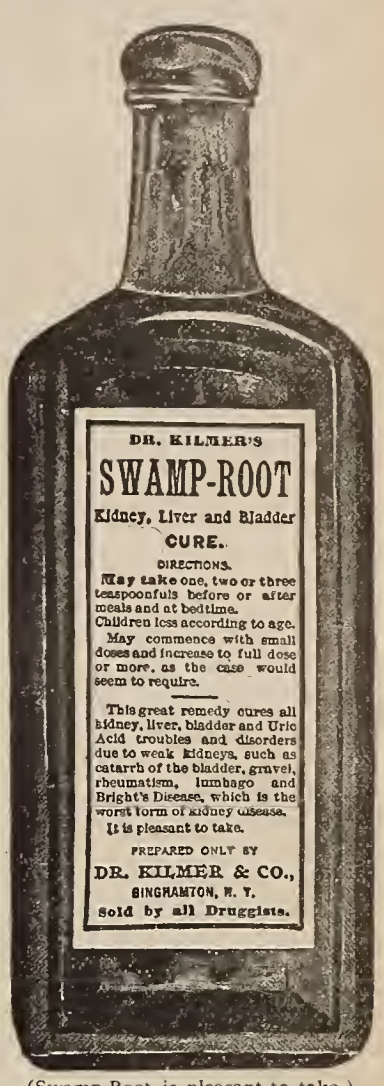

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I was out of health and run down generally; had no appetite, was dizzy and suffered with headache most of the time. I did not know that my kidneys were the cause of my trouble, but somehow felt they might be, and I began taking Swamp-Root, as above stated. There is such a pleasant taste to Swamp-Root, and it goes right to the spot and drives disease out of the system. It has cured me, making me stronger and better in every way, and I cheerfully recommend it to all sufferers.

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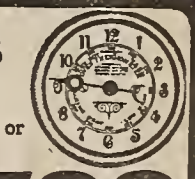

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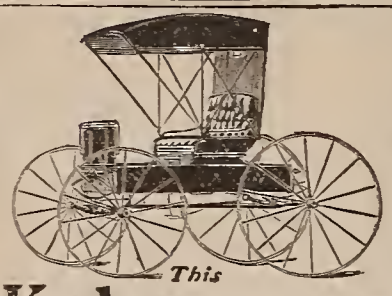

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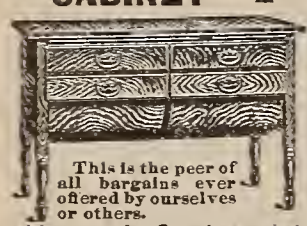

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10 lbs. S. C. Prunes	.60
1 lb. Cocoanut (Shred.)	.20
25 l'ge bars Laundry Soap	1.00
10 bars Scouring Soap	.50
1 4-lb. bar Castile Soap	.56
1-lb. can Pure Pepper	.29
2 4-oz. Lemon Extract	.45
2 4-oz. Vanilla Extract	.55
3 pkgs. Breakfast Food	.30
10 lbs. Gloss Starch	.50
1 can Cinnamon	.12
1 can Mustard	.12
2 lbs. Best Currants	.26
2 lbs. Best Raisins	.25
Total	$9.99

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Reference: Fort Dearborn National Bank, Chicago.

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How to Dress

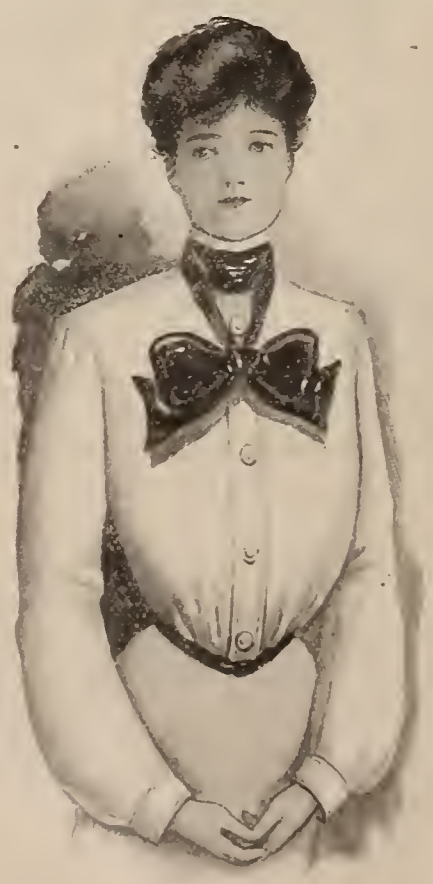
To anticipate the fashions, to be ahead of the season, is the aim of the well-gowned woman to-day. She likes to be among the first "by whom the new are tried." That is why, when the calendar is still registering the winter months, her thoughts wander toward the new spring modes.

LADIES' PLAITED SHIRT-WAIST

To know of the early spring shirt-waist is her first desire. She may be glad to hear that the new models are charmingly feminine and daintily elaborate, and that many varying designs are stamped with Fashion's seal of approval.

Ladies' Plaited Shirt-Waist

Here is a fashionable shirt-waist for the girl who is determined to look dainty and fetching and distinctly feminine this spring and summer. It charmingly illustrates the craze for the Russian cross-stitch embroidery. It emphasizes the long shoulder, the full sleeve, and also the fact that the 1904 shirt-waist has indeed lost its severity of style. The front of this dainty model is laid in stitched plaits, while but two plaits are used at either side of the center back. The upper part of the full sleeve is also laid in stitched plaits. Below the elbow the plaits are let out to form fullness. This fullness is gathered into a band cuff at the wrist. The Russian cross-stitch worked in dull green, deep blue and brilliant red on bands of scrim form the trimming for this waist. The waist may be of scrim, momie-cloth, light-weight cotton cheviot or linen. The pattern for the Plaited Shirt-waist, No. 244, is cut for 32, 34, 36 and 38 bust measures.



PLAIN SHIRT-WAIST

Shirt-Waist with Chemisette

The chemisette shirt-waist is a novelty of the season. This smart model will add variety to any girl's collection of shirt-waists. It is a buttoned-up-the-back model, with the front of the waist cut out at the neck so that it may be worn with different chemisettes. There are two plaits at each side of the front, and one plait at each side of the center back. The full bishop-sleeve is made with a new, dainty little tucked cuff. Of white linen this waist is attractive with the neck plaits and tucks outlined with a binding of deep blue linen. It is the style of waist that can be made up in any of the fashionable cotton fabrics, like damask, momie-cloth, mercerized cotton or hopsack, or it can be used as a model for a dress-waist. It would be charming in crêpe de chine, with pipings of satin in a contrasting color, and worn with a dainty tucked chemisette of white mull. In Louisine silk, with velvet pipings, it would also be good style. Pearl buttons should be used when the waist is made in any of the cotton fabrics, but the buttons may be as costly as desired when the waist is of silk or crêpe. The pattern for the Shirt-waist with Chemisette, No. 245, is cut for 36, 38 and 40 bust measures.

SHIRT-WAIST WITH CHEMISETTE

Plain Shirt-Waist

A waist built on regular shirt lines will always be in favor for certain occasions, no matter how many captivating rivals it may have in the dressier models. This useful shirt-waist for knock-about wear is made with a loose shirt-front, the gathers to be adjusted to suit the wearer when she puts the waist on. The shoulder-line is long, and the sleeve is the typical shirt-sleeve. The waist fastens in the front with big pearl buttons, and the back is made with a yoke. Cotton cheviot, butcher's-linen, madras, canvas or cotton rep are all good materials for a waist of this style. With this waist a linen collar or linen turnover should always be worn, and the stock should either match the material of the waist or be of silk. The silk stock with the big, big bow will be all the fashion this spring. Sometimes the bow hangs a trifle below the stock, and then again it is tied right at the neck, with one big loop at the right and two ends at the left. The pattern for this Plain Shirt-waist, No. 247, is cut for 36, 38 and 40 bust measures.

Shirt-Waist with 1830 Yoke

Here is a shirt-waist which emphasizes the fact that though the 1830 modes are conspicuous in the spring fashions, yet they are modified to suit the taste of the American girl of to-day. The genuine 1830 maid of long ago would never recognize the yoke in this waist as one of her own. However, it gives just sufficient length of shoulder and just sufficient droop to suit the girl of to-day. The yoke is cut out prettily in squares in front and made with tabs over the shoulders, while at the back it is straight. Where the waist joins the yoke in front it is laid in narrow tucks, which are stitched down for about four inches. Below this the fullness is let out until it is confined again at the waist-line in gathers. Two narrow box-plaits add a touch of novelty to the front of the waist. The sleeve is a bishop model, with a cuff finished with two tucks. This waist would be most attractive in canvas or scrim, with the edge of the yoke stitched in colored silks. The pattern for the Shirt-waist with 1830 Yoke, No. 249, is cut for 32, 34, 36 and 38 bust measures.

SHIRT-WAIST WITH 1830 YOKE

Fancy Shirt-Waist

This dainty waist should be made of soft mull, French or Persian lawn, batiste or fine dimity. The yoke may be of "broderie Anglaise," or of any of the pretty fashionable "à jour" embroideries which emphasize the openwork effect. The lower part of the waist in front is laid in plaits. The back is plain, with a few gathers at the waist. The bishop-sleeves are gracefully full below the elbow and gathered into a band cuff at the wrist. This waist should be very dainty indeed made of white batiste, with the deep yoke of white "broderie Anglaise" embroidered in daffodil-yellow wash-silk. The same delicate touch of yellow may be introduced in the collar and the box-plait by rows of stitching. The pattern for this Fancy Shirt-waist, No. 248, is cut for 34, 36, 38 and 40 bust measures.

FANCY SHIRT-WAIST

PATTERNS

To assist our readers, and to simplify the art of dressmaking, we will furnish patterns for any of the designs illustrated on this page for ten cents each. Send money to this office, and be sure to mention the number and size of pattern desired.

Our new spring catalogue of fashionable patterns is now ready, and will be sent free to any address upon request.

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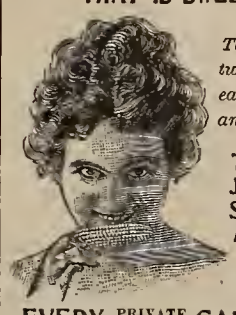

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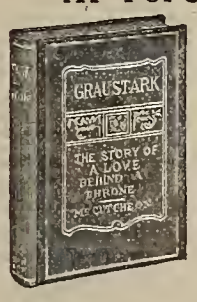

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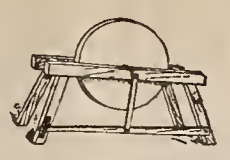

THE WHEAT-FIELD PUZZLE

Here are the Names of Six Things Found in a Wheat-Field at Harvest-Time. The First is Represented by the Picture. The Others are Hidden in the Five Sentences Which Follow. Can You Make Out the List?

2—The bear did not harm the child.
3—I believe we shall have a big rain to-night.
4—James talks intelligently.
5—Is she afraid of burglars?
6—Does Hocking Valley coal burn well?

We Offer Eight Dollars Cash in Four Prizes, as Follows: Two Dollars to the First Boy from Whom we Receive a Correct List; Two Dollars to the First Girl from Whom we Receive a Correct List; Two Dollars to the First Man from Whom we Receive a Correct List, and Two Dollars to the First Woman from Whom we Receive a Correct List. Contestants Must State Their Ages, and Answers Must be Received Before April 1st.

ALSO A PRIZE FOR EACH STATE AND TERRITORY

As further rewards for our great family of readers, a copy of the popular book entitled "Dick Onslow" will be given for the first correct list of answers received from each state and territory. This means a book for each of the forty-five states, one for each territory, one for the District of Columbia, also one for each province of Canada. The first correct list from each state wins a prize, giving an equal opportunity to all our readers wherever located. In the states where the cash prizes are awarded the prize books will be given to the person sending the second correct list, so that in no case will any one person receive two prizes. Answers must be addressed to the "Puzzle Editor," FARM AND FIRESIDE, Springfield, Ohio.

ANSWERS TO PUZZLE IN THE FEBRUARY 15th ISSUE

The Fruit Puzzle

1—Date. 2—Pear. 3—Grape. 4—Apple. 5—Fig. 6—Orange.

The cash prizes are awarded as follows:

Man's cash prize, two dollars—John McCormick, Washington, District of Columbia.

Boy's cash prize, two dollars—John L. Fisher, Wilmington, Delaware.

Woman's cash prize, two dollars—Anna Johnson, Columbus, Ohio.

Girl's cash prize, two dollars—Rose Callan. Bristol, Rhode Island.

As a consolation prize a picture of George Washington is awarded to the following persons, whose lists of answers were the first to reach us from their respective states:

Alabama—Mrs. W. C. Steward, Birmingham.
Arizona—A. P. Walbridge, Phœnix.
Arkansas—G. H. Beck, Searcy.
California—Mrs. E. A. Howe, Dutch Flat.
Canada—Nova Scotia, J. D. Matheson, Maccan. Ontario, N. J. Hennessey, South London. Quebec, Edith Banan, Montreal.
Colorado—Wm. F. Cushing, Fowler.
Connecticut—Bessie Parmelee, Fairfield.
Delaware—Howard E. Lodge, Grubbs.
District of Columbia—Mrs. T. G. Weinick, Washington.
Florida—Mrs. G. E. Muriel, Jacksonville.
Georgia—Mrs. B. L. Exum, Lawrenceville.
Idaho—Mrs. John F. Myers, Weiser.
Illinois—Minnie B. Hayden, Chicago.
Indiana—M. H. Wolfer, Richmond.
Indian Territory—Mrs. D. M. Trees, Tulsa.
Iowa—Ruby Simmons, Conway.
Kansas—Hubert H. L. Jordan, Hutchinson.
Kentucky—Mrs. S. F. Clark, Auburn.
Louisiana—Mrs. R. S. Kimball, Gibsland.
Maine—A. G. Ballard. North Bucksport.
Maryland—Mrs. L. Mehring, Yorkroad.
Massachusetts—Mrs. F. L. Darling, Springfield.
Michigan—Mrs. G. E. Pooler, Burroak.
Minnesota—Mrs. Herman Hopke, Blooming Prairie.
Mississippi—Miss Susie Manning, Jackson.
Missouri—Mrs. I. G. Smith, McCredie.
Montana—Sim Carson, Basin.
Nebraska—Mrs. L. E. Nare, St. Paul.
New Hampshire—Mrs. Alice Hardy, Greenville.
New Jersey—Anna M. Benish, Millstone.
New Mexico—Grace Barker, Las Vegas.
New York—Wm. V. Dolph, Montana Falls.
North Carolina—J. M. Hayes, Burlington.
North Dakota—Sadie E. Temple, Dickey.
Ohio—Lucy Robson, Elyria.
Oklahoma—Wilford Carpenter, Medford.
Oregon—Mrs. E. M. Reed, Lagrande.
Pennsylvania—Anna M. Miller, Ligonier.
Rhode Island—Mrs. A. G. Earle, Bristol.
South Carolina—Myrtle Brown, Denver.
South Dakota—L. A. Kingsbury, Sioux Falls.
Tennessee—Irene H. Sowell, Columbia.
Texas—R. M. Clark, Amarillo.
Utah—Mrs. M. E. Smith, Far West.
Vermont—Miss Eva A. Johnson, Bellows Falls.
Virginia—Mrs. Helen Cox, Jonesville.
Washington—Nettie L. Service, Fairfield.
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Wyoming—Dolores Holmes, Glendo.

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A Scoop Suppressed

By WILLIAM FORSTER BROWN

A DOOR at the end of the dingy room swung open a foot, and a small, freckled face topped by a halo of tousled red hair appeared in the aperture. "Hello, McCracken?" vociferated the owner, shrilly, searching the room with his eyes. "Oh, I say, Mac, Crab wants you upstairs—right off."

A tall man bending over the edge of the battered table rose hastily, shying a roll of typewritten copy into the mouth of a yawning brass tube set in the wall opposite. "All right, Mickey," he said, cheerfully, "tell him I'm coming.

"Wonder what the old man wants?" soliloquized the reporter, as he hurriedly mounted the rickety stairs, for when Crabtree Nichols, generalissimo and editor-in-chief of the "Telegram" forces, condescended to dispatch his private office-boy after a reporter it was well for the wanted individual to move with speed. "It must be a special assignment of some sort. I hope to goodness it hasn't anything to do with the Kosher meat riots; two days and a night of that business is about enough for James McCracken, Esq. Harris swore this morning that if I sent in any more copy full of Keifferman and Feinklestein, he'd sue me for the e and i type he wore out, anyhow," turning the knob of the office door, "here's hoping it's something out of the rut."

The thin, nervous face of Crabtree Nichols, clear-cut and businesslike as a steel wedge, peered over the edge of a pyramid of litter as the reporter halted by the side of the desk. "Oh—er—you, McCracken?" he said, briefly. "Sit down." McCracken complied. "Forster's sprained his knee," went on the editor, rapidly. "He's just 'phoned me from the Emergency. You'll have to go down to Clayton Point and do the launching. Of course, that isn't much of a trick by itself, any 'cub' on the staff could do it, and I shouldn't have sent for you if that was all; but it isn't. Miss Grover, the mayor's daughter, is to do the christening—she's a grandniece or something of the Captain Grover the boat's named for—and her father is going to make a speech at the luncheon afterward. I fixed it for Forster to have a place on the staging when Miss Grover cracked the bottle. Grover will be there, too. Here's Forster's card for the whole business, lunch and all. I've written your name in place of his.

"What you are to do—the whole thing in a nutshell—is to cultivate Grover. See if by hook or crook you can get him to drop some hint as to what he is going to do about the South Side Railroad Franchise. He's close-mouthed, but he is mighty anxious for reëlection, and if a clever man that knows his business can't get something out of him this afternoon it'll be a wonder.

"With all the excitement, cheers, the honor paid his daughter, and a chance to pose for votes in his speech, Grover'll be in a mood to loosen up, if he ever is. There'll be plenty of champagne, too, to help things along. If you hustle you can get the one-forty-three train and be in the yard at two-thirty. That's all." Nichols dove into the pile of paper, and McCracken walked out of the office.

For once opportunity had deigned to dangle her forelock within reach of his fingers; not for a second did he fail to recognize that fact. Clayton politics had been on the boil for six weeks over the franchise bill, and the key of the situation lay in the mayor's hands. So far John Grover had baffled interviewers and puzzled even the prominent men in his own party by a sphinx-like refusal to commit himself as to whether or not he would sign the bill if it passed. The paper that could discount his final action would make its rivals "sit up."

McCracken was a born reporter, tireless and undaunted, and save for the years of experience that had made Forster the "Telegram's" star man, second to no one on the staff. Nichols knew his man down to the ground, but for once he would have doubted his own astuteness could he have known that his trusted left bower, steaming swiftly in the direction of the North River Iron Works, was thinking almost as much about Molly Grover and the chances that might possibly come to him of speaking to her, and maybe touching her hand, that afternoon as he was of the United States torpedo-boat "Grover" and the political secrets locked in the mayor's inner consciousness.

McCracken had been in love with Molly Grover for more than a year—ever since he had made her acquaintance during a never-to-be-forgotten afternoon on the Clayton golf-links—and while he was not without stray but tangible proof that the young lady in question took an interest of sorts in his welfare, he realized well enough that between the daughter of John Grover—a rich and rising politician with an unbounded ambition—and a more or less obscure reporter drudging on a daily newspaper there was a great (social) gulf fixed; still, when one is young hope is a factor that refuses to be eliminated, and it is something to spend even a meager three hours in the immediate vicinity of the "only girl in the world," although the future holds forth no prospect of orange-blossoms and ultimate possession. McCracken sauntered into the yard with his heart thumping joyously, and whistling to himself "When the Girl You Love, Loves You."

With the launching this story has nothing to do save to chronicle the fact that it was much like other launchings and went off smoothly, and that the mayor, his pride in his handsome daughter open and manifest, made the speech of his life, was roundly applauded, and departed cityward in high spirits, carrying with him intact the secret that the discomfited McCracken, despite adroit questions and Machiavellian leads, had failed to penetrate.

Even the memory of five warm little fingers laying in his palm for a longer period than etiquette demanded failed to altogether dispel the gloom that wrapped the reporter's soul when he boarded the train for the run in. The thought of standing before "Crab" Nichols and confessing himself beaten cut McCracken to the quick. "I know what he'll say to himself," the reporter thought, ruefully. "'I might have known nobody but Forster could have—'"

"Papers, evening papers!" shouted the train-boy, breaking in on his gloomy thoughts. "All about the franchise bill! Extra telegram!"

McCracken bought a paper and opened it. "By Jove!" he ejaculated, as his eye caught the "scare" head-line, "the bill passed this afternoon. Grover'll have to come out of his shell now, and do one thing or the other—I'd give my chance of a raise to know which. Wouldn't it be a scoop for the morning edition." The reporter glanced idly down the text of the bill, which was printed without abridgment. The title read, "An ordinance granting the South Side Electric Railroad Company rights of franchise on certain streets in the city of Clayton, Massachusetts."

The general tenor of the bill was familiar enough to McCracken, and he scanned the headings of the first half dozen clauses without special interest. The measure had been introduced by the local trolley-line for the purpose of having its original franchise extended, chiefly to frustrate the designs of a certain powerful outside railway corporation desirous of pushing its lines through Clayton. The local road had promised three-cent fares within city limits if the bill passed.

Public opinion was equally divided, although the inhabitants of South Clayton—on the other side of North River—were unanimously in favor of granting the extension, as the South Side Company intended to lay tracks over the Main Street Bridge into their territory.

The citizens of Clayton itself, disgusted with the previous slow-going, old-fogy methods of the local road, and skeptical of its heralded reformation, welcomed the possibilities of a change to the up-to-date methods of the other company. It was generally conceded by the advocates of the bill that if, it passed, and was turned down by the mayor, their political strength was insufficient to pass it over his veto. Party lines were sharply drawn on the issue, and it was tolerably certain that whichever way Grover chose would cost him the votes of the other side at the next election. It was a matter of much speculation as to which side he would deem it safest to sacrifice.

At the sixth clause McCracken's gaze was suddenly arrested, and he stared at the printed page as if hypnotized. The clause read: "And the aforesaid petitioning company shall likewise be granted the exclusive right of crossing North River by means of Main Street, Stone, or other bridges now or hereafter to be constructed, and of laying tracks in such streets of South Clayton as it may deem expedient."

McCracken re-read this clause twice, doubting the evidence of his eyes, but each time its tremendous possibilities became more and more apparent. "Great Scott!" he muttered to himself, "can it be possible that the city council passed the bill with this clause in it, and never guessed what it meant? Some of them must have realized—wonder how much it cost the railroad to shut their mouths?"

The reporter's thoughts flew instinctively to the "Telegram." "I've got a scoop this time that lays over anything Forster ever did," he thought, jubilantly. "If the train's on time, maybe I can get it into to-night's regular edition. By Jove!" at a sudden thought, "if Grover signs the bill, the 'Telegram' can make it hot for him at the next election. Crab can wait until the mayor's renominated—and there isn't much doubt but what he will be—and then spring this 'clause six' business. Grover couldn't make the public believe he hadn't known about it in the first place—and winked at the steal—in a thousand years; he'd go to the political graveyard on the fly, for people wouldn't stand for a man that let a thing like that get by him, whether he was innocent or not.

"Grover's square, though, if he is a politician," thought the reporter, with growing compunction, "and he's got a record 'way ahead of most of them. It would be a confounded shame if he was thrown down. I'll bet money he doesn't suspect for a second that the franchise bill isn't all straight." All at once temptation, mighty, formidable, assailed McCracken, and the paper slipped unheeded from his fingers. "Suppose instead of giving this away I go to the mayor, and if he has decided to sign the bill, tell him?" he argued. "Maybe he won't thank me, but he'll veto the bill for sure, and when he comes out with his reasons there won't be anything in Clayton too good for him—he will be morally sure of a second term."

Staring from the window of the car at the lights whizzing past in the gathering darkness, the reporter fought a short, sharp battle with himself. If he went to the mayor, good-by to his scoop and all chances of glory and a possible "raise;" on the other hand loomed invitingly the probable gratitude of a "coming" influential politician—and Molly Grover. Duty as represented by the "Telegram" fought a good fight, but the odds were too great; with the grinding of the brake-shoes McCracken's mind was made up, and with characteristic promptness the reporter alighted on the platform before the train had come to a standstill, collared the first hackman his eye fell on, and fairly dragged him through the side door of the station toward his waiting hack.

"22 Sewall Avenue," McCracken announced, briefly. "Hustle now—I've got to see the mayor on important business, and time is money." Flashing a greenback before the gaze of the astonished driver, the reporter dove through the door of the carriage, and the nearly simultaneous forward jerk of the hack thumped him over on the seat.

"If I don't catch Grover in, or he's signed the bill, it's all off," he thought, with inward misgiving; "and it just would have made a howling sensation in the evening edition—but it's too late for that, anyhow."

Mayor John Grover greeted McCracken cordially, and extended his hand with the "your-the-one-person-in-the-world-I-wanted-to-see" air that had made him famous. "I'm glad to see you newspaper boys at any time," he said, laughing, waving aside his visitor's apology for interrupting his dinner. "I always intend to stand in with the press, you know. I'll wager a hat I can guess what brought you. You want to know about the franchise bill the council passed this afternoon. Well, I may as well let the cat out of the bag now—I'm going to sign it. That'll give you a—What do you call it?—beat for your paper, won't it? Well, I'm glad to put a good thing in your—"

"Excuse me, Mr. Grover," broke in McCracken, earnestly, pulling a copy of the evening paper from his pocket with fingers that twitched in spite of him, "will you please look at clause six of that bill, and give me your candid opinion about it?"

The mayor glanced down the page, his face showing a faint trace of perplexity, as if he scarcely comprehended what the reporter was driving at. "Oh—er—er—about South Clayton," he remarked at last, the wrinkles on his forehead melting away. "Well, I'll tell you. That's the strongest part of the bill. It's the principal reason I decided to sign it—the people over the river should have had better accommodations long ago, and—"

McCracken interrupted. "Mr. Grover," he said, eagerly laying his hand impulsively on the mayor's arm, "doesn't it strike you that there is a great deal more in that clause than appears on the surface? Suppose you sign the bill? You'll have given the South Side Railroad Company a grip on South Clayton that can't be loosened for thirty years. The railroad will have the place by the throat, and can do as they please about fares, accommodations and everything else. The bill doesn't say anything about three-cent fares over the river; it says, 'exclusive right to cross North River,' etc. That seems to me to tie up South Clayton pretty effectually in the way of transportation, and prevent its getting any kind of service but what the South Side Railroad is willing to give. That 'exclusive right' business bars any other road getting in there for thirty years, doesn't it?

"South Clayton is bound to grow. There's two big mills there now, and more coming. By and by, when the people over there wake up to the fact that this franchise has sold them into bondage to the South Side Railroad, I wouldn't give much for the political future of the men responsible."

McCracken paused, his swift speech halted by the look of astounded comprehension dawning on the mayor's face. "Good Lord," Grover exclaimed, running one hand excitedly through his hair, and staring at the newspaper in the other as if it was an infernal machine about to annihilate him, "why didn't I have sense enough to see through the trick for myself? The South Side Railroad worked a mighty shrewd scheme in that clause, but I'll block their game if it costs me a second term as mayor. You're right enough about the future, but the South Claytonites won't thank me for preventing their getting street-railway service, I can tell you—just now, anyway. You've done Clayton a good turn, Mr. McCracken," the mayor concluded, dubiously, "but I'm afraid you've done for me politically."

"I don't see it in that light," said McCracken, warmly. "Suppose you veto the bill, and then put a signed article in the Clayton papers stating your reasons? Every man in the city that stands for good clean politics, and has got sense enough to look ahead a few years, will see that you have done a wise thing and safeguarded municipal interests. Of course, you'll have the railroad and its influence to fight, but that isn't strong enough to defeat you."

The mayor dashed the newspaper to the floor. "You've hit it!" he cried, seizing the reporter's hand, and shaking it like a pump-handle. "I believe I'm losing my own wits. The bill's a downright steal, of course, on the face of it. If I show it up in the papers to-morrow morning I believe on my soul I'd be sure of a second term even on an independent ticket—" Grover's eyes suddenly narrowed at the corners. "Look here, McCracken," he said, bluntly, "I wish you'd tell me how you happened to come to me with this business instead of rushing it into your paper? A sensation of this sort would be a cinch for the 'Telegram,' and would have meant something to you personally, eh? Besides, I've never regarded Mr. Nichols as very friendly to me politically. There's always a reason at the bottom of everything. What's yours?"

McCracken looked the mayor squarely in the eyes. "I've got two reasons, Mr. Grover," he said, slowly. "Firstly, I have always believed you to be that uncommon person, a clean politician, and I hated to see your future chances ruined by something that wasn't your fault; secondly—well, I don't always intend to be a newspaper man, I hope to get into politics myself some time, and if you go higher, as I am sure such a man as you will, I'd like to have your friendship—and help."

Grover silently regarded for a full minute the alert, frank young face looking into his own, then all at once he laid his hand familiarly on McCracken's shoulder. "I thank you, Mr. McCracken, for your good opinion," he said, feelingly, "and I can truly say that I have tried to be what you claim I am. As for the other part of it," with a quick smile, "you can rely on me now or in the future for any assistance in my power that will further your ambition. By the way," as McCracken reached for his hat, "I don't mind saying, between ourselves, that if I get a second term here in Clayton, I shall strengthen my fences for the legislative nomination, and I shall need a secretary—a sharp, brainy, ambitious young fellow who will be devoted to my interests—like yourself, for instance. That wouldn't be a bad opening, eh? Well, well," as McCracken began to stammer his thanks, "suppose you come up to dinner to-morrow night—I shall have more time then—and talk it over. Perhaps my daughter can give you some points as to what I shall expect of you as my secretary; she's filling the position just at present. I shall expect you at seven-thirty. Good-night, McCracken. I sha'n't forget in a hurry the service you have done Clayton—and me, I promise you. Good-night, McCracken; good-night."

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The Ghost in Scarlet

BY CHARLES SHELDON FRENCH

"BETTER take the old Springfield musket and plenty of ammunition," said Judd Tompkins to his brother, Todd, whose turn it was to boil maple-sap that night. "A bear was seen to-day at Wellington, not two miles from here, and coming this way."

"All right, Judd. I'll take the Springfield just to gratify you, but I expect a visit from a bear as little as I do a call from that grenadier's ghost. By the way, all well-bred ghosts that I have ever heard of were clad in white. I don't take any stock in a ghost that wears a scarlet uniform. As to the bear, the day has been foggy, and probably some Wellington child has been frightened by a calf."

"The grenadier's ghost" was a favorite subject of banter between the brothers. The legend that the wooded valley below the Tompkins home was haunted by the ghost of a British soldier had been handed down from generation to generation in the Tompkins family, losing nothing on the way, ever since Burgoyne's captive hosts had marched past there on their way from Saratoga to Boston.

Judd Tompkins believed that he had seen the apparition of the stalwart grenadier one beautiful June night, marching with stately tread through the shadowy aisles of the old maple woods. Todd, perhaps because there was less imagination in his nature, made sport of the "scarlet ghost" at every opportunity.

Down through the deep woods, where giant spruce and hemlock trees interwove their branches with ancient beeches and maples, walked Todd, accompanied by the two dogs—Major, a Newfoundland, and Carlo, a shepherd's dog.

The brothers had inherited from their father this farm, one of the best on the Green Mountains, under certain restrictions. The farm was a large one, one mile long from north to south, and three fourths of a mile wide. It had been owned by the Tompkins family, its boundaries unchanged, for more than a century. The north end, on moderately high land, containing most of the cultivated ground, was bordered on all sides by a belt of timber forty rods wide, which, except windfalls and dead trees, the brothers were not at liberty to cut until it reached a large size. Near the south end of the farm, which dipped down into a deep ravine, was laid out an eighty-acre tract, originally covered with large trees, stones and boulders, which must be cleared, the trees felled, roots dug out, stones and boulders removed, and the tract plowed deeply.

This was a herculean task. Several generations of the Tompkins family had already spent their energies upon it, and it was known far and near as the "Tompkins Folly." Although the land when subdued yielded enormous crops, the cost was far too great. No reason was known for the extravagance, except that some Tompkins generations ago had marked the boundaries of the clearing, and the obligation to continue the work had descended from father to son under an impression that the family honor required it.

Judd was more contented than Todd. He loved farming, and had married and brought his wife to the old homestead. Todd longed to remove to the city, and certain dainty epistles which found their way weekly to the farm would have testified, could they have been put in evidence, that another was quite as anxious as he for his freedom. But until the eighty-acre tract was cleared neither of the brothers was at liberty to sell out, even to the other, or to leave the farm. The promise to their father was a verbal one, but the brothers respected it as if it were written in the deed.

To-night Todd tended the fires, filled the boiling-pans with sap, and between times rested upon a rough bench near the sugar-house door.

At midnight the dogs were uneasy; Major was growling, Carlo barking. Todd jumped up.

It was a beautiful night; a full moon rode overhead, white clouds floating lazily past it. The sap from a thousand maples was dropping slowly into the tin buckets in all parts of the wood, making melody to the ear attuned to hear it, and—a wildcat was snarling down toward the ravine.

"Come, let us get him!" said Todd to the dogs, after he had tended the fires.

As they passed under the thick dark branches of a spruce-tree the cat pounced upon Carlo. There was a rough-and-tumble fight, the two rolling out into a patch of moonlight, where Carlo released his hold and came limping and whining to his master, who promptly dispatched the wildcat the instant the dog was out of the way.

But where was Major? Reloading his musket, Todd peered cautiously about. Soon he heard a growl which was not that of a dog. On the very edge of the ravine was the Wellington bear, with Major facing him at a respectful distance. Todd took good aim. At such short range there was not the slightest excuse for a poor shot. With a bullet from the Springfield through his brain, Bruin leaped, or rather fell, down the ravine. Over and over he tumbled until his clumsy bulk was wedged between a granite boulder and a big basswood-tree.

"I guess you'll be safe there until morning, and it'll take the oxen to pull your carcass out of there then," said Todd.

Returning to the sugar-house he passed through a corner of the eighty-acre clearing.

"The Tompkins Folly, indeed!" he exclaimed. "It will take two years more to finish this monumental piece of foolishness. But we promised father, and there is an end of it."

Once more he performed his regular round of duties at the sugar-house, and tried to snatch a little rest. He was very tired, and soon, without intending to do so, he fell asleep.

Presently a hand touched his shoulder. Before him stood the grenadier, who beckoned him to follow. The moon was now well to the westward, and but little of its light struggled through the tree-tops. But Todd kept in sight of the scarlet uniform, and followed the figure which cast no shadow and left no footprints. Soon they stood at the foot of Pulpit Rock, which the grenadier climbed, and then bent down to reach underneath a shelf which jutted out from the main rock. He reached upward, and seemed to find a secret niche, from which he drew a parcel, which he examined and then replaced.

Day was just breaking when Todd awoke, frightened at finding that he had dropped asleep. The maple-syrup was perilously near burning. From its nail by the sugar-house door he took down the dinner-horn which he used to signal his brother at the farm-house. One long blast was blown, then three short ones, which meant to Judd, "Bring the oxen."

"Do you want me to gather the sap?" asked a voice at the door a few moments later.

"No, Judd; I thought you would all like some bearsteak for breakfast, that's why I called so early," was the reply.

Half an hour later, with their game loaded, they were passing Pulpit Rock, when Todd called a halt.

"What! Have you more game here?" asked Judd.

"Nothing only a hint which I got from dreaming of your scarlet ghost last night," replied Todd, who was now examining the rock.

At first he could find no opening; then, crouching down under the rocky shelf, and feeling every inch of surface, he found a small opening upward, barely large enough to admit his hand, but dark as a pocket and suggestive of snakes and other vile things, and enlarging above into a cavity a foot or more in diameter. From this, after a few moments, he withdrew a moldy and unclean object, which he brought to his brother, and they examined it together.

The outer wrapping, of leather, fell apart almost at their touch; a second wrapping, also of leather, was in better condition; the kernel of all, a number of one-hundred-pound Bank of England notes, was perfectly preserved.

"Not a drop of water could reach that little natural vault," said Todd, "else these would have been destroyed half a century ago."

At breakfast Grandfather Tompkins, whose faculties were wonderfully alert in spite of his ninety-odd years, surprised the family by his comment on Todd's discovery.

"This seems to be the proper time," he said, "for me to give the history of the scarlet ghost. On the night when a portion of Burgoyne's captured army, on the march eastward, was quartered in a barn not far from here, a party was hunting in the woods below. Daniel Tompkins, then only a boy, was sure that he caught a glimpse of a figure in scarlet and bearing a spade beyond Pulpit Rock. When he told his companions later they only laughed at him, as the British were well guarded, although it is notorious that many of the patriot guard had partaken so freely of New England rum that a prisoner might easily have eluded them. When Daniel came into possession of the farm, a few years later, he staked out the eighty-acre tract within whose limits he believed treasure had been hidden. As the object of the clearing has been accomplished, you boys are excused from further work upon it."

I make this extract from a letter speeding from the farm to a near-by city:

"Now, my dear, I see no reason why you may not set the date. Meanwhile be kind enough to visit us, as I cannot rightly leave Judd in 'sugaring,' the busiest time of the year. There was nothing ghostly about those notes. We have received twelve thousand dollars in exchange for them, and Judd and I have made a settlement. He takes the farm and two thousand dollars; I receive ten thousand dollars. TODD."

SOME years ago a farmer lad, grown restless, and tiring of tilling the soil and the small returns of farm life, left the comfortable home fireside to seek a quicker fortune in the gold-diggings. Parting from home and friends caused many a gulp and a tear, and even the horses and cattle received a tender parting caress. The insignificant hen with her brood of chicks were the only animals on the place that did not receive a farewell visit from this embryonic gold-miner. After years of toil more strenuous than ever experienced on the farm, twilight finds him seated before his lonely cabin with his partner—a dejected pair—hopes unrealized; wealth unfound. A home paper two months old serves to while away the twilight hour. It has been read and reread in parts—nothing left but the poultry column. For want of something better, he reads listlessly. A paragraph strikes him. "Great Scott, partner," he exclaims, "listen to this! Wouldn't this freeze you? An eminent professor of the United States Agricultural Department has been studying the *hen*. Think of writing books on *hens*. Listen to this! 'The American hen produces more in dollars and cents than all the gold and silver mines in the country combined; and if the value of the hens be added, the aggregate is twice the annual yield of all the gold and silver mines, and six times the value of the wool crop.' Say, pard, let's pull up stakes, go home to dad, and raise hens." And so they did. It is not our purpose to relate their progress in the poultry business, except to state that before they succeeded in making their venture profitable they had yet to learn that *a sick hen profiteth not*, and that after she is given a cleanly home, proper food and fresh water, there still comes times when she needs tonics, powders, etc., to keep her body in a healthy condition and to make a *wealth-producing hen*. If needed by the hen to insure commercial success, how can men and women hope to reach the desired plane of the world's activity without healthy bodies? Rich, red blood, an active liver, a healthy stomach and regular bowels are the best safeguards against disease.

The most independent man on earth is the farmer, for he makes the earth yield him almost everything needed for life. He knows that as he sows so will he reap. He usually keeps strong and healthy with constant strife with nature—in sunshine and in pure air. At sundown, when work is done, he finds most refreshing sleep in bed, such as only a tired man knows. In the same way that the earth yields food for man, so does it provide remedies for human ills. Thousands of households throughout the farming districts of the United States know the value of Dr. Pierce's Golden Medical Discovery. It is nature's most valuable and health-giving agent—made without the use of alcohol. It contains roots, herbs and barks, and is the concentration of nature's vitality as found in the fields and woods. This remedy has a history which speaks well for it because it was given to the public by Dr. R. V. Pierce, founder of the Invalids' Hotel and Surgical Institute, at Buffalo, N. Y., nearly forty years ago, and has since been sold by druggists in ever-increasing quantities. Some medicines, tonics or compounds enjoy a large sale for a few years, then disappear from the public attention; but Dr. Pierce's Golden Medical Discovery has proved such a reliable blood-remedy and tonic that it often enjoys the confidence of several generations in a family, and its increased sales year by year, coming from the recommendations of those who have tried it, prove its lasting merit, so that every bottle bears the stamp of public approval. Every other well-known blood-maker and tonic for the stomach that we know of contains alcohol, but Dr. Pierce guarantees that no alcohol is contained in his "Medical Discovery." This remedy works in the natural way.

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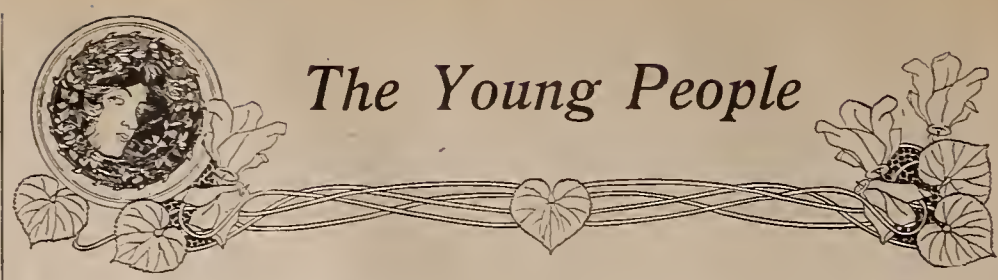


Peggy Parmenter's Peculiar Pie

"Now, Peggy dear," said Mrs. Parmenter to her daughter, hurriedly, "there is plenty of bread and butter, and you can get out a jar of strawberry jam. I had intended making a cream pie, but that will wait, for I must go and see what is the matter over at Grandma Parmenter's—I saw Doctor Graham driving in there a little while ago. You can have the water hot for the tea, and make it exactly as I have told you—scald out the pot, put in the little measure of leaves, and let it sit just long enough for you to sing one verse of 'Baby Mine.' Don't do this until after father comes in, and be sure to wait on him nicely if I don't get back in time. It will take you some time yet to finish whipping the lining into your cloak, and be sure to finish it this evening."

Peggy looked after her mother as Mrs. Parmenter sped down the lane of old cedars to grandma's house. For a little while she felt lonely at being left, but then it came to her that this time was the very first one when she had been trusted to stay and keep the house, and be there to welcome papa when he should come in from his work at the big shoe-factory in the little town not far away.

"Bread and butter and strawberry jam!" said Peggy, with a sniff. "Isn't that a supper to set before him? Why, I don't know the day when mother hasn't fixed up something extra." She rubbed her forefinger thoughtfully up and down the window-pane for a bit, and then deliberately folded away the cloak she had been told to finish. The weather was warm, and she would scarcely need it to wear to school to-morrow, so she concluded that she would surprise her father and mother.

"I remember exactly how mother makes it," she mused, and poked a fresh stick of wood into the fire. Out in the cupboard was a nice roll of pie-crust all ready for her, and in a little while she had brought a cupful of cream from the pantry, some sugar, two eggs, and the little bottle marked "Oil of Lemon," and went vigorously to work.

The pie was just in the oven when father and mother both came in, laughing, together.

"Peggy, where are you?" called Mrs. Parmenter, and then her eyes fell upon a scarlet cloak lying neatly folded upon the work-basket. One loose edge betrayed the fact that the lining wasn't sewn in.

"Here, mother," answered the little girl, as she ran out of the kitchen, her face all flushed from the heat of the stove. "Was grandma sick?"

"Not at all," laughed her mother. "Come help me fix the supper-table. I have a surprise for you."

"And I have one for you," said Peggy, inscrutably; and then she frisked about, bringing in the plates and cups and saucers, and placing in the center of the table a bunch of autumn leaves that she had gathered as she was coming home from school. Indeed, she had all the trotting about to do, for mother had sat down to mend the lining of that cloak.

"You might need it, my dear," she said, without a reproach, and she smiled so lovingly that Peggy didn't feel much abashed.

They had eaten the bread and butter, and father had helped himself again to strawberry jam, and then Peggy decided that it was time to serve her pie. It was done to a turn, but as the little girl laid the creamy brown wedges out upon her pretty pansy plates it seemed to her that it had a queer smell. Thinking that maybe it was only because it was hot, she said nothing, and carried it triumphantly in, and then looked very modest while her parents exclaimed over her cleverness.

"Great goodness!" ejaculated Mr. Parmenter at his first mouthful.

"Oh, did it burn you, father?" asked Peggy, anxiously.

"A little," he answered, and then sat playing with his fork, and looking curiously at his wife, who was breaking into her own piece.

"Sakes alive!" she cried.

"Oh, mother, and you got burnt, too!" cried Peggy; but she had to turn then to see what was making that unusual noise at the front door.

Mrs. Parmenter looked at her husband, and laid her hand upon her lips, and then they both with one accord reached for their glasses of water.

Peggy found that Doctor Graham had come by to tell grandma that little Cousin Maude from way off in Florida was coming in on the seven-o'clock train, and grandpa was already at the door, waiting for Peggy to slip into her cloak and hood and go with him to meet her. The little girl danced with delight, for she had so long wished to have Uncle Robert's little girl come to see them, and so she forgot all about her pie.

After a little while with grandma, both little girls came to Peggy's house to spend the night together.

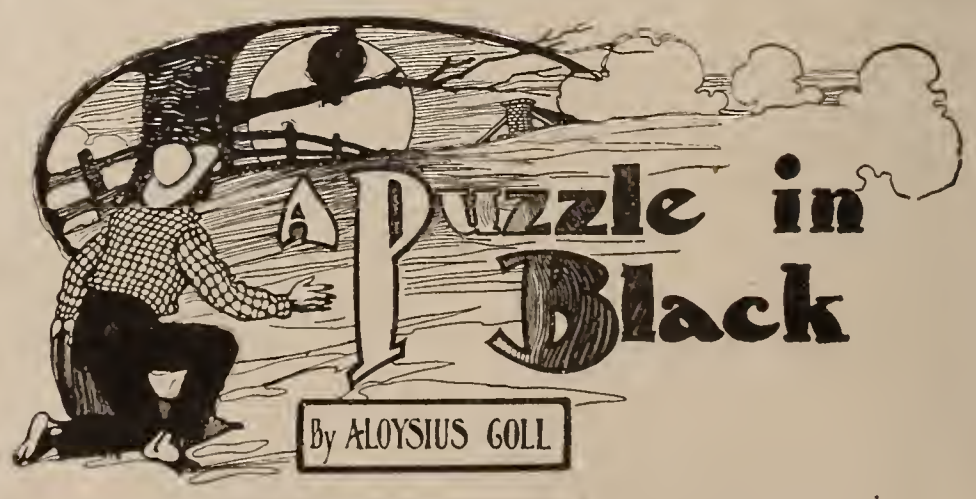
"Mother," said Peggy, "Maude is just as hungry as she can be. I wonder if she wouldn't like a piece of my pie."

"Why, darling, it is all gone," said mother, and then she brought some slices of bread and butter.

It was not until Peggy had grown to be a big girl that she learned that she had flavored the cream pie with spirits of turpentine, for she couldn't smell because she had a bad cold.

MRS. HENRY WIGHT.

One of our readers, as soon as he read that we were after a million subscribers for FARM AND FIRESIDE, happened to meet a few of his neighbors at a public sale, and spoke to them about FARM AND FIRESIDE and its good qualities, and in less than the time it takes to tell it had FIVE subscriptions for FARM AND FIRESIDE. It only requires a word from you when you see your neighbor. Now for the million. Just one from you, please.



What fo' I snatched dat pullet
With a sassy li'l comb?
An' why I ketch 'er in ma arms,
An' pack 'er easy home?
D'yah spec' Ise mighty wishin'
Fo' sugah-ham an' eggs,
Dat Ise fetchin' home dat pullet
With feathahs on 'er legs?

What fo' I snatched dat pullet
With a sassy li'l comb?
An' why I hol' 'er like a babe,
An' pack 'er gentle home?
D'yah spec' Ise starvin' fo' a mess
O' yellow om'let fry?—
Say, mistah, fetch another guess;
Dat ain't de reason why.

What fo', den, says y', mistah,
Dat Ise fetchin' easy home
Dat pullet with d' sassy neck
An' pert an' rosy comb?
Jes' feel dat bulgin' breast, an' feel
Dem plump an' juicy legs—
Say, mistah, d'yah spec' I snatched
Dat pullet t' lay eggs?

—What to Eat.

The Young People

Kate's Pie

This is the Pie that Kate made!

This is the Cook, with the apron white,
That heated the oven exactly right,
To bake the pie that Kate made.

This is the Rat that left its hole,
To taste the cream in the china bowl,
And smelt the pie that Kate made.

This is the old but active Cat,
That caught the meddlesome, nimble rat,
That nibbled the pie that Kate made.

This is the Maid, so trim and tall,
That waited at table and swept the hall,
And carried the pie that Kate made.

This is the Dame, so short and fat,
That owned the old but active cat,
And carved the pie that Kate made.

And these are the hungry girls and boys,
Full of merriment, fun and noise,
Who ate the pie that Kate made.
—Little Folks.

Lace that Grows

THE lacebark-tree (Lagetta lintearia, one of the daphnads) may perhaps be called an eccentricity of Nature. Its inner bark when stretched laterally resembles lace so nearly that it can be, and is, put to the ordinary use of lace. In Jamaica, where this lofty tree grows in abundance, the bark is made into ruffles, collars, purses, caps, doilies, etc. The negroes also make durable clothing from it, while the whites use it principally for ropes and cables.

A whip made from this tree was recently brought from Jamaica. The handle ends in a rosette, which is formed merely by a loosening of the inner bark. Much assertion is necessary to persuade most persons that this is the case, and that a rosette of ordinary lace has not been affixed to the wood. The whip is one piece throughout, the bark being plaited to form the long, strong lash.

A governor of Jamaica is said to have presented Charles II. with a cravat, frill and ruffles made of this natural lace.—Daniel M. Clark, in the Junior Young People.

He Kissed His Mother

Sum up all there is in the world, and among it can be found nothing that speaks better for a boy than the kiss he gives his mother.

A Chicago judge is somewhat of the same opinion. He judged two boys less from the evidence given by witnesses than from the evidence presented by themselves in the treatment of their mothers in court.

One boy, whom the judge decided must go to the reformatory, tenderly kissed his mother good-by, sinking his own misfortune in sympathy with the sorrow of his mother. The judge looked on, and instantly decided that there was enough good in that boy to enable him and his mother to work out his own salvation.

At the same moment another boy, whom the judge had announced would probably go free, glanced meaningly at his mother, who sat weeping, and started to walk out. "That boy will go to the reformatory."—Wesleyan Methodist.

Boys and Girls

We are trying hard to get a million subscribers to FARM AND FIRESIDE. We believe that if each one of the boys and girls who read FARM AND FIRESIDE were to help it would be easily and quickly done. We will pay you handsomely for getting up clubs, and it is so easy to get up clubs to FARM AND FIRESIDE. Write to-day, and we will tell you all about it. Better get up a club of five or six while you are waiting to hear from us. FARM AND FIRESIDE is twenty-five cents a year. We shall be more than pleased if you will. Let's hurry. Time goes by, and it won't come back to us.

This Factory is Good for $50

Split Hickory Special $50

This Factory Is a Guarantee that Backs up Our **$50 SPLIT HICKORY SPECIAL BUGGY** That we make to order and sell on **30 DAYS FREE TRIAL** with a *Two-Year Iron-Clad Guarantee.* We make only Split Hickory vehicles. Expert workmen and modern machinery and methods are employed the year round by us making nothing else but Split Hickory vehicles to be sold direct to users. Back of every Split Hickory Buggy stands this great factory, with its years of successful operation, constantly increasing output; progressive, up to the times in every particular. We will ship promptly, **will allow you to use it 30 days before you decide whether to keep it or not,** and will give a positive **Two Years Guarantee** Every Split Hickory Special Buggy is furnished complete with good, High Padded Leather Dash, Fine Quality full length Carpet, Side Curtains, Storm Apron, Quick Shifting Shaft Couplings. Full Leathered Shafts with 39-inch Point Leathers, Special Heel Braces and Corner Braces. Full description of this Special Bargain Buggy at $50. Send for our **Free 136-Page Catalogue** of Split Hickory Vehicles and Harness.

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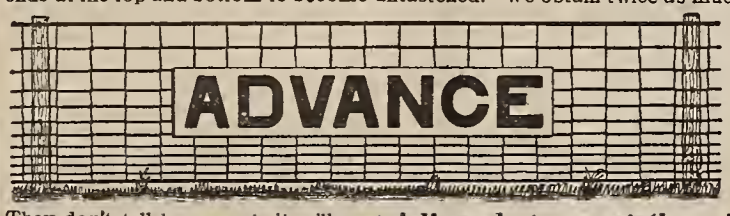
is the result of fifteen years' experience in the fence business. We have not only learned how to construct a fence so as to obtain the greatest possible amount of strength from the wire used, but how to market fence by the most economical method. This is why we advertise and sell our fence **direct from the factory to the farmer.** The profit which the dealer makes is a dead loss to the farmer, as it makes the fence no better. In order to relieve the purchaser of all risk, and to convince him of our confidence in our goods and in him, we offer to sell Advance Fence

ON 30 DAYS FREE TRIAL

We are the originators of this unique and unquestionably fair method of selling fence. It enables you to see and test the fence for thirty days in actual use and be sure you are perfectly satisfied. If not perfectly satisfactory you can return it at our expense and your money will be refunded. The reason we have such confidence in **Advance Fence** is because we know that it is constructed on the right principle. No light wires used. The stay wire is endless, being twisted into the cable from one stay to the next. This leaves no loose ends at the top and bottom to become unfastened. We obtain twice as much strength from the wire used as fences with cut stay wires.



By selling direct to the user we are enabled to quote you

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The dealer can't buy it any cheaper than you. We can't give the middleman a profit or we would not have any ourselves.

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on 40 rods or more. F. O. B. factory prices are misleading. They don't tell how much it will cost **delivered at your station.** Drop us a card and we will obtain the lowest freight rate to your railroad station and make you a delivered price on our complete line of Fencing, Gates, Etc. We will also send you our **FREE FENCE BOOK** which describes and illustrates **23 styles**—a fence for every requirement of the farmer. Also **24** sizes and styles of steel frame gates. It describes our Giant Stretcher and tells how to use it. This book should be in the hands of every farmer. You will be a better judge of fences after reading it. If you want to be a careful fence buyer you should study fence construction. Your name and address on a postal will bring **book** and **wholesale prices.**

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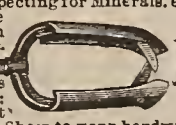

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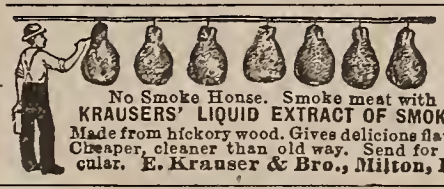

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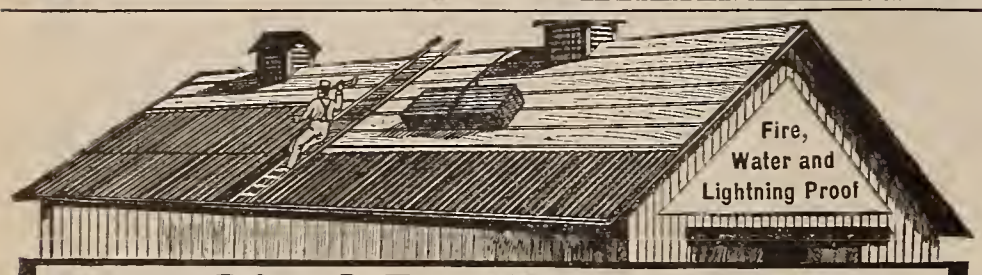
"Black-Draught Stock and Poultry Medicine will stop the ravages of chicken cholera in any flock if given time and it frequently saves birds which are past eating by the medicine forced into the craw. If it is given to the flock before the cholera or roup appear they will escape an attack though their neighbors all die of it." This is a statement that was printed years ago when Black-Draught Stock and Poultry Medicine was new on the market. Since then thousands of poultry raisers have given it to their flocks and this statement stands as true and uncontroverted today as it was then. The following are two of the thousands of letters received by the Chattanooga Medicine Company from poultry raisers commending Black-Draught Stock and Poultry Medicine as a roup and cholera cure.

KAUKAUNA, WIS., Jan. 27, 1902.
My chickens have been dying for the last few years and this year four died. I got a can of Black-Draught Stock and Poultry Medicine and not one has died since and all my chickens are healthier now than ever before. FRED LAW.

WALTERBORO, S. C., May 10, 1902.
We find Black-Draught Stock and Poultry Medicine the best medicine we ever used. My mother had hens dying of cholera and other diseases for four or five years. She got a can of Black-Draught Stock and Poultry Medicine and this spring she has not lost a chicken and eggs are plentiful. JOHN WESTLEY REED.

BLACK-DRAUGHT STOCK AND POULTRY MEDICINE

is as good for horses, cattle and hogs as it is for poultry. This great remedy is a great economy to stock or poultry raisers. When put in their food once or twice a week it makes hens lay better makes horses do more work and makes hogs and cattle fatter. It will pay for itself ten times over. Ask your dealer for it. If he does not keep it send 25-cents to The Chattanooga Medicine Co., Chattanooga, Tenn., and a half-pound air-tight can will be mailed you.



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to all points east of Colorado. This roofing at $2.00 per square is our No. 10 grade, semi-hardened. Very easy to lay; requires no experience; hatchet or hammer the only tool needed. Comes in **Flat, Corrugated, V Crimped, Brick Siding and Beaded Ceiling or Siding.** Prices on application. **Send us your order today** for immediate shipment. Write for our catalogue No. 34 on furniture, building materials, wire, pipe, plumbing materials and supplies of all kinds. **We buy at sheriffs' and receivers' sales.**

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Local agencies and complete repair stocks everywhere

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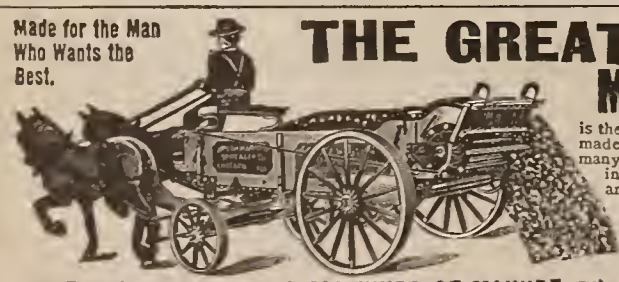
Made for the Man Who Wants the Best.



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is the only Spreader made that has an **ENDLESS APRON** and the many advantages which it possesses. It's always in place and ready to receive the load without any turning back either by hand or complicated, easily broken machinery. The front and rear axles are of same length which, with the **Broad Tires Prevents Rutting** of fields, meadows, etc. and makes **LIGHT DRAFT. SPREADS ALL KINDS OF MANURE,** wet, dry, frozen, light, chaffy, packed or caked. Spreads lime, plaster, wood ashes, cotton-seed and hulls, etc. **Can be changed instantly to spread thick or thin while the machine is in motion—8 to 25 loads per acre.** Has the only successful **END GATE AND BEATER AND HOOD PROTECTOR IN USE.** Made of best material in every way and sold under a **POSITIVE GUARANTEE** as to **quality, capacity and durability.** All parts breaking within one year will be replaced without charge. **Write for free Illustrated and Descriptive Catalogue**—the best and most complete spreader catalog ever published.

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Figure a Little On the Future.

If you are looking for opportunity or investment *TRY THE SOUTHWEST.* All over the Southwest cities and towns are growing up, expanding, requiring more, demanding more; peopled by eager, pushing, wideawake citizens, who see the virtue of encouraging enterprises of every kind, the needfulness of getting more and better facilities, and more hands to develop the country. Briefly the condition is this: The Southwest is really in need of nothing save people. More men are wanted. In the Southwest are vast areas of unimproved land—land not yielding the crops of which it is capable. The same thing, in a different way, is true of the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and manufacturing plants, for small stores of all kinds, for banks, newspapers and lumber yards. Mechanics and professional men, both are in demand. *Tell us what you want,* how much you have to invest, and we'll help you with information about a good opening.

GEO. MORTON, Gen'l Pass. Agt., 606 Katy Building, ST. LOUIS, MO.

Selections

The Breaking-Plow

I am the plow that turns the sod
That has lain for a thousand years
Where the prairie's wind-tossed flowers nod
And the wolf her wild cub rears.
I come, and in my wake, like rain,
Is scattered the golden seed;
I change the leagues of lonely plain
To fruitful gardens and fields of grain
For men and their hungry breed.

I greet the earth in its rosy morn,
I am first to stir the soil,
I bring the glory of wheat and corn
For the crowning of those who toil.
I am civilization's seal and sign,
Yea, I am the mighty pen
That writes the sod with a pledge divine,
A promise to pay with bread and wine
For the sweat of honest men.

I am the end of things that were,
And the birth of things to be;
My coming makes the earth to stir
With a new and strange decree;
After its slumbers, deep and long,
I waken the drowsy sod,
And sow my furrow with lifts of song
To glad the heart of the mighty throng
Slow feeling the way to God.

A thousand summers the prairie rose
Has gladdened the hermit bee;
A thousand winters the dripping snows
Have whitened the grassy sea;
Before me curls the wavering smoke
Of the Indian's smoldering fire.
Behind me rise—was it God who spoke?—
At the toil-enchanted hammer's stroke,
The town and the glittering spire.

I give the soil to the one who does,
For the joy of him and his,
I roused the slumbering world that was
To the diligent world that is;
Oh, Seer with vision that looks away
A thousand long years from now,
The marvelous nation your eyes survey
Was born of the purpose that here, today,
Is guiding the breaking-plow!

—Nixon Waterman, in Success.

How Tolstoy Became a General

THE Russian family of Tolstoys, to which the novelist belongs, owes its rise, according to one of the pilgrims to Isnaya Polyana, to a curious episode. In Peter the Great's time, the founder of this family was a doorkeeper before the apartments of the emperor. One day he was at his post, when a nobleman approached and asked to be admitted. The doorkeeper, however, refused to let him in, declaring that the emperor had given him positive orders that no one that afternoon was to be admitted to his presence.

"But," said the nobleman, "I am the Prince—"

"Still I cannot admit you, sir," said the doorkeeper.

Exasperated, the nobleman struck the doorkeeper across the face with his riding-whip.

"Strike away, your highness," said the other, "but nevertheless I cannot let you in."

The tumult had been overheard by the emperor. He now opened the door and asked what the trouble was. The noble told him. He listened in silence, and then he said, "You, Tolstoy, was struck by this gentleman for obeying my orders. Take my stick, and strike him back."

"But, your majesty, this man is a common soldier."

"Then I make him a captain," said the emperor.

"But I am an officer of your majesty's household."

"I make him a colonel of my life guards."

"My rank, as your majesty knows, is that of general," protested the nobleman.

"Then I make him a general, too, and thus the beating you are to get will come from a man of your own rank."

The noble now took his punishment philosophically. As for the young soldier, he was next day commissioned a general and made a count. From him the present family of the Tolstoys is said to be descended.—Boston Post.

Greater Than the World's Applause

While continual and determined thoroughness develops character and leads to success and happiness, one of the greatest success-killers and character-destroyers is a habit of leaving things half done or otherwise incomplete. It makes no difference whether our work is seen or not, for there is a certain something within us which gives approval when a thing is done to a finish, and it says "Right" to a fitting act or a completed work, and "Wrong" to a half-done job or a slipshod service. This still, small voice keeps repeating, "Wrong, wrong! You know it is all wrong. It isn't right. You know it isn't right." It tells us that we are failures, and we know when we are failures, although the world may applaud us and the press may laud our achievements over the world. A man must learn that there is something greater than the world's applause and nearer and dearer to him than others' approval—and that is his own. If we cannot have our self-respect, the respect of others is only a mockery. However, if lax methods and slipshod work are continued the self-condemnation wears off, the slack work does not seem such a terrible thing, another temptation to carelessness is yielded to, and soon we are so hardened that some day we are surprised to find that we are habitually slighting work. The tiny departures from conscientiousness have become mighty cables of habit; conscience no longer reproaches; self-respect is no longer outraged. We can do things in the most slipshod manner without the slightest feeling of discomfort or regret. After a while, if the tendency is not checked, the whole character becomes undermined and honeycombed, so that everything one does has a certain incompleteness about it—is not quite right—lacks something. Such actions affect one's attitude almost as does dishonesty. In fact, it is dishonesty to take a position with the tacit agreement that one will do his level best for his employer, and then to slight work, half do it, botch it.
—Orison Swett Marden, in Success.

The Rockies an American Italy

Perhaps the one element of the climate of the Rocky Mountain region that impresses the new-comer most deeply and also most pleasantly is that of the abundance of sunshine. In this particular, both in winter and in summer alike, this is not only the Italy of America—it outshines Italy and equals northern Egypt. Here every day has its sunshine, and practically every day is all sunshine. When you go into the mountains for the winter, leave your ear-muffs at home and take your smoked glasses. There is more sunshine than in either California or Florida. Dwellers in the mountains who have been called by business or who have gone in obedience to fashion to Florida for the winter seldom go more than once; they come back to hear with envy of the clear, bracing days their neighbors have enjoyed at home. At Colorado Springs and at Manitou they average three hundred and forty sunshiny days in a year—that is, nearly ninety-three per cent of their daylight is bright sunshine. While they have twenty-five cloudy days, Chicago has one hundred and fourteen, New York one hundred and three, Asheville one hundred and six. And equally important is the fact that the shortest days of winter will afford eight hours of sunshine; contrast this with the four and one half hours, the most you can hope to gain in the celebrated valley of Davos, Switzerland. Salt Lake City averages three hundred and fifteen days bright and clear.

The bracing effects of low humidity, together with the commercial advantages of equable temperature, constitute a condition evidently advantageous to business undertakings and to individual enterprise. The air of the Rockies is built for business. Here one feels a surplus of energy, a reserve of vigor and of full vitality.—Henry F. Cope, in The World To-Day.

The Meaning of Bad Crops to the Russian Peasant Farmer

Tolstoy's description in one of his short stories of the starving of a Russian farmer's family is brought to mind by Prince Kropotkin's article in "The Youth's Companion" of February 11th on "Harvest Time in Russia." The results of the harvest mean to the peasant "either complete ruin and misery or a relatively secure existence for the year to come; in fact, questions of life or death. Sheer despair, therefore, spreads in the villages if late frosts or an exceptionally wet summer or long droughts destroy the chief crop—rye in the north and center, and wheat in the south. The peasants remember the failure of crops in the years 1891 and 1892, which affected more than one third of Russia and reduced fully thirty million people to starvation, followed by hunger-typhus and scurvy in the most terrible forms—to say nothing of the loss of nearly all their cattle and horses."

The Family Physician

By R. B. HOUSE, M.D.

Fruits

THE relative value and importance of fruits are said to be according to the following order: Apples, grapes, bananas, oranges, peaches, pears, apricots, pineapples, plums, strawberries, raspberries, blackberries.

How to Live One Hundred Years

Dr. John B. Rich, of New York City, who is ninety-four years of age, recently gave an address on how to live one hundred years, in which he said: "Be good-natured; be clean; exercise; be comfortable; sleep in the most comfortable bed you can get; don't eat twice as much as you need, and don't eat food that will abuse that poor old muscle, the human stomach."

Getting Out of Bed

Don't jump up the first thing as soon as your eyes are open. Remember that while you sleep the vital organs are at rest—the vitality is lowered, and the circulation is not so strong. A sudden spring out of bed is a shock to these organs, especially the heart, as it starts to pumping the blood suddenly. Take your time in getting up—yawn and stretch; wake up slowly; give the vital organs a chance to resume their work gradually.

Notice how a baby wakes up. It stretches its arms and legs, rubs its eyes, and yawns, and wakes up slowly. Watch a kitten wake up. First it stretches out one leg, then another, rubs its face, rolls over, and stretches the whole body. The birds do not wake up and fly as soon as their eyes are open. They shake out their wings, and stretch their legs, waking up slowly. This is the natural way to wake up. Don't jump up suddenly. Don't be in such a hurry, but stretch and yawn, and yawn and stretch. Stretch the arms and the legs; stretch the whole body. A good yawn and stretch is better even than a cold bath. It will get you thoroughly awake, and then you will enjoy the bath all the more.—Exchange.

Uses of Fruits

That fruit has many uses besides pleasing the taste is well known, but the exact properties of each kind are not so well understood by the consumers, and a few suggestions on the subject may not be amiss.

Fruit alone will not sustain life for any great length of time, but it helps to furnish a variety in the diet. It stimulates and improves appetite and digestion, relieves thirst, introduces water into the system, acts as a laxative or astringent, stimulates the kidneys, and supplies the organic salts necessary to a proper nutriment. If the medicinal uses of fruit were understood, and care taken to use the appropriate kinds, much less medical treatment would be needed. Among the laxatives are figs, prunes, dates, nectarines, oranges and mulberries. The astringents are blackberries, dewberries, raspberries, pomegranates, quinces, pears, wild cherries, cranberries and medlars. The kinds used for diuretics are grapes, black currants, peaches, whortleberries and prickly pears. The refrigerants are red and white currants, gooseberries, lemons, limes and apples. Apples are useful as a stomach sedative, and will relieve nausea, and even seasickness. Grapes and raisins are nutritive and demulcent, making them excellent for the sick-room. It is sometimes difficult to keep raisins, figs and dates away from the inquisitive little ants and roaches, but this is easily accomplished by putting them in paper bags that have been well brushed over with strong borax-water, and dried before the fruit is put in. The little pests do not like the borax, and will not gnaw through the sack when thus prepared. A fig slit open makes a good poultice for a boil. It is especially useful for gumboil.

We Want One Hundred Thousand

club-raisers for Farm and Fireside. We will pay each one liberally for the work he does. We are going to get one million subscribers to Farm and Fireside, and we must have club-raisers to do the work. Any one can be a club-raiser, no matter what he may be doing. It does not require all your time—just your opportunities and spare moments. Wouldn't you like to help Farm and Fireside along? You can easily do it. Now, don't wait, but write to-day for particulars to Farm and Fireside, Springfield, Ohio. You will never regret any favors you may show us, and we will appreciate them to the fullest extent.

The Family Lawyer

By JUDGE WM. M. ROCKEL

Legal inquiries of general interest from our regular subscribers will be answered in this department free of charge. Querists desiring an immediate answer by mail should remit one dollar, addressed "Law Department," this office.

Statute of Limitations as to Real Estate

I. J. W., Washington, asks: "If a person has peaceful possession of property for eleven years, can the owner put him off? My neighbor here tells me that I cannot be compelled to evacuate my home (as I consider it)."

The law in your state is that no action can be maintained for the recovery of real estate unless the plaintiff was seized or possessed of the premises within the ten years before the commencement of the action. The difficulty in your case is that you have held the land thus long by the permission of the owner, and not against his wish or claim. You have all this time recognized him as owner. This is not adverse possession, and in my opinion unless you have some better reason than mere possession you will have to move.

Incumbrance Placed by Will

A. B. K., Indiana, writes: "A man dies, willing to the widow eighty acres with the buildings on, and to the daughter eighty acres with no buildings, mentioning in the will that the daughter should have the use of outbuildings, but specifying no time. Now, after four years, she still continues to use the barn and cribs. The widow wishes to sell, but the daughter refuses to quit using the buildings. Can the widow sell, and give a good title, or must she first effect a settlement with the daughter, and how?"

The daughter would have a right to use the cribs as long as she owns the land. If the widow wants to sell her land free from this right, she should get the daughter to release her right, which can be done by means of a quitclaim deed.

Contract Between Father and Son

T. A. A., Indiana, says: "A father is ninety-one years of age. His son agrees to attend to his business affairs free of charge. In October, 1902, the father told the son he would go and live with him, the son to provide the father's food and clothing, to care for him, and to pay his taxes on one hundred and sixty acres of land and his personal property, and to receive the father's share of crops in payment. The father did not go to live with the son, but provided for himself and paid his own taxes. The son has done some chores for the father, for which the father is willing to pay. There were no witnesses to the verbal agreement. Can the son hold the father's share of the crops?"

Unless the son has lived up to his part of the contract, or at least made an offer to, he could not keep the crops. The probability is that the contract was abandoned by mutual consent.

Divorce, Effect on Trust, etc.

C. D., Illinois, writes: "A. has three sons—B., C. and D. He gives each a deed to forty acres of land at their marriage, for them to improve and build a home upon. C. proves to be improvident, and accumulates debts. In order that the land might not be sold for taxes, C. and his wife deed their land back to A. A. then has a trust deed made, in which he conveys to D., C.'s brother, the said forty acres, and also all other land which he intends to give to C. at his death, reserving the use during his lifetime of all except the first forty acres. This deed is in trust for C. and his wife (naming her) and their children. C.'s wife afterward gets a divorce from C. on the charge of cruelty. She resumes her maiden name and charge of the youngest child, but does not ask alimony. She afterwards marries another man. Can she now claim any interest or part of the benefits, income, etc., arising from said trust estate, A. being dead, and having made no change in disposing of said lands? No provision was made in the deed for the trustee to receive any pay for his services. Can he charge up his time?"

I am of the opinion that C.'s wife is still a beneficiary under said deed. The divorce did not affect her property rights. The trustee ought to have a competent court to fix his right. He is entitled to a reasonable compensation for his services.

For most good patterns you have to pay twenty cents, but we sell Perfect Patterns for ten cents. The chief expense in the making of patterns is the designing. We, too, would have to charge twenty cents if we sold only a hundred of each kind instead of thousands. A small profit on each of many patterns is better than a big profit on each of a few. Send for our catalogue to-day.

The Hens It Pays to Keep

In the hen-houses you will doubtless find a whole row of dull-eyed, worthless drones squatted on the roosts at midday, with heads pulled down between their shoulders, just waiting for the next meal to be brought to them. These are the loafers that eat your corn and give nothing in return. Science has discovered that these hens can be made profitable layers by judicious feeding and the use of a tonic and invigorator to build up the vitality of these birds, improve the digestion and place the system in a healthy condition.

DR. HESS
Poultry Pan-a-ce-a

is the famous prescription of Dr. Hess (M.D., D.V.S.) for making hens lay. It invigorates and strengthens every organ, so that all of the egg material is rapidly converted into eggs. It not only cures but prevents gapes, cholera, indigestion and the like. It insures a bright plumage and makes fertile eggs for hatching. Costs but a penny a day for 30 fowls. It is indorsed by leading poultry associations in the United States and Canada and is sold on a written guarantee. Prices, 1½ lbs., 25c.; 5 lbs., 60c.; 12 lbs., $1.25; 25 lb. pail, $2.50, except in Canada and the Pacific Slope. For Chickens, Turkeys, Ducks and Geese it has no equal. Take no poultry food as a substitute.

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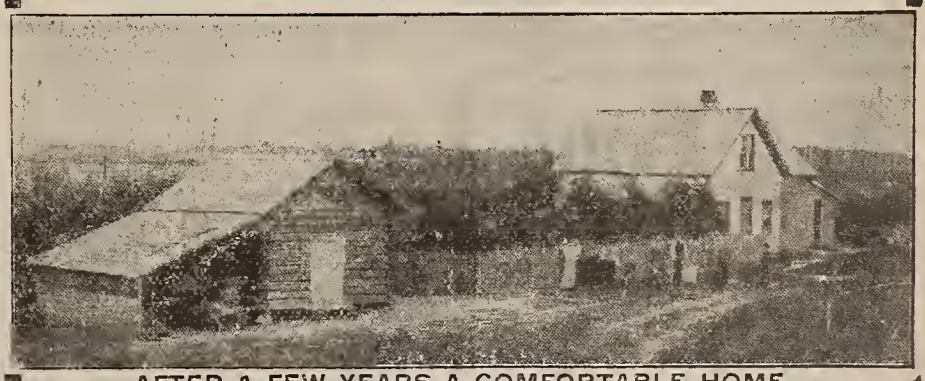

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You can begin with 40 acres; but if you can pay more you should take 80 or 160 acres; 80 acres would cost you $80 cash and $5.60 a month. Why not begin to-day, if you want a farm. Cut out the Coupon, write your name and address, and I will send you the booklet that will tell you how.

If you want to buy, tell me how much you have to invest and I will submit a list of improved farms or lands to select from.

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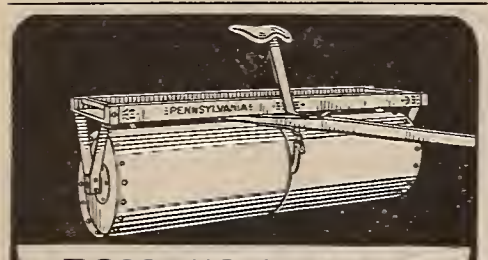

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Wit and Humor

Deadly War

"WHAT do you think will be the result of the war in Asia?"

And the man who had been slowly spelling out the proper names looked up from his paper, and said, "I don't know. Nervous prostration, probably."—Washington Star.

Vindicated

"Charley, dear," said young Mrs. Torkins, "I have done you a great injustice."

"In what way?"

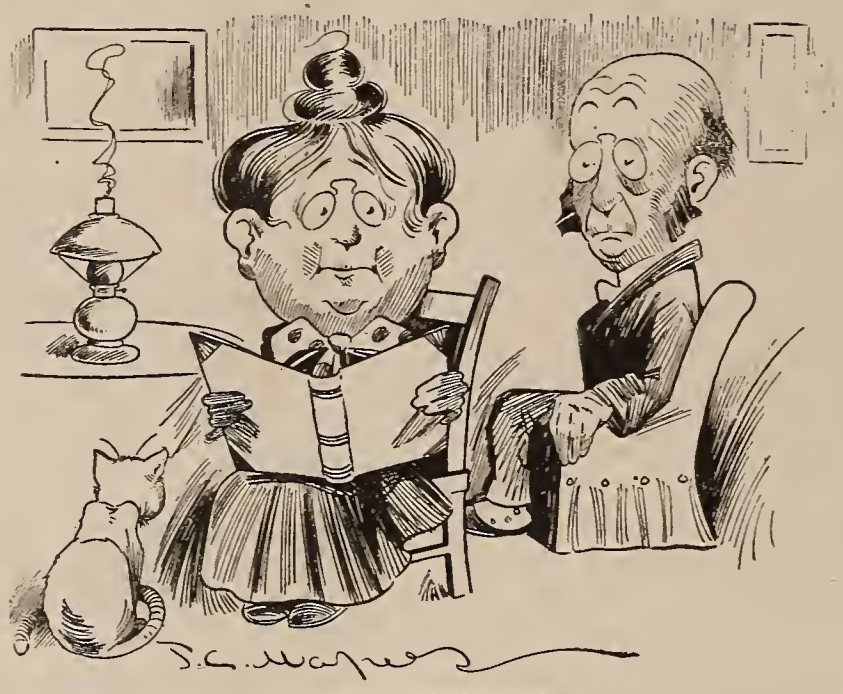
"I suspected you without reason. I asked several of your friends that you go out with of evenings whether you knew how to play poker, and every one of them thought a minute and said you didn't."—Washington Star.

Why He Didn't Win

Mr. Choate, the ambassador of the United States at London, tells a story of a sculling-match that took place between an Englishman, a student of Oxford, and an Irishman, a student of Cambridge. The Briton won handily. At no time was he in danger of defeat. Moreover, in a spirit of fun and bravado, he had stopped two or three times in his course, and had bade the Irishman in the rear to "hurry up."

After the race the Irishman came in for a good deal of chaff in view of the overwhelming defeat he had suffered. But the Irishman merely shrugged his shoulders.

"Faith," he said, "if I had had the long rests that he took I could have beaten him easily."—Youth's Companion.



QUITE A DIFFERENCE

Mrs. Henpex—"I understand you are going about telling people I boss you."
Henpex—"You are mistaken, my dear; I've been telling them that I had the boss wife."

Essay on the Horse

The following remarkable essay on the horse is said to be from the pen of an Indian student:

"The horse is a very noble quadruped, but when he is angry he will not do so. He is ridden on the spinal cord by the bridle, and sadly the driver places his foots on the stirrups and divides his lower limbs across the saddle and drives his animal to the meadow. He has four legs; two are on the front side and two are afterward. These are the weapons on which he runs. He also defends himself by extending these in the rear in a parallel direction toward his foe, but this he does only when he is in an aggravating mood. There is no animal like the horse. No sooner they see their guardian or master than they always cry for food, but it is always at the morning time. They have got tails, but not so long as the cow and such other like animals."—New York Tribune.

Letter from a Constituent

A member of Parliament in Australia recently received from an indignant constituent, who had asked him in vain for a "billet" (a job in politics), the following unique letter:

"Deer Sur: You're a fraud, and you know it. I don't care a rap for the billet or for the muney either, but I object to bein made an infernil fool of. Soon as you was elected by my hard-working friends a feller wanted to bet me that you wouldn't be in the house moren a week before you made a ass of yousself. I bet him a Cow on that, as I thought you was worth it then. After I got your note sayin' you deklined to ackt in the matter i druv the Cow over to the Feller's place an' tole him he had won her. That's orl I got by howlin' meself horse for you. You not only hurt a man's Pride, but you injure him in bizness. I believe you take a pleshir in cuttin your best friends, but wate till the clouds roll by an' they'll cut you—just behind the Ear, where the butcher cuts the pig. Yure no man. Yure only a tule. I lowers meself ritin to a skunk, even tho I med him a member of Parliament."—Argonaut.

How Mean

Young Wife (at dinner)—"I didn't tell you, Adolphus, I cooked the dinner today myself."

Husband—"Indeed. Then in my thoughts I have been doing Mary Ann a great injustice."—Pearson's Weekly.

Trying Kindness

This story is told at the expense of a recently appointed supervisor of a public school in this city:

One day she happened to be visiting a school where a young incorrigible was undergoing punishment for a series of misdemeanors.

The teacher cited him as "the worst boy in the school—one I can't do anything with. I've tried everything in the way of punishment."

"Have you tried kindness?" was the gentle inquiry of the other lady.

"I did at first, but I've got beyond that now."

At the close of the session the lady asked the boy if he would call and see her on the following Saturday. A boy arrived promptly at the hour appointed. The lady showed him her best pictures, played her liveliest music, and set before him a luncheon on her daintiest china, when she thought it about time to begin her little sermon.

"My dear," she began, "were you not very unhappy to have to stand in the corner before all the class for punishment?"

"Please, ma'am," broke in the boy, with his mouth full of cake, "that wasn't me you saw. It was Pete, and he gave me ten cents to come here and take your jawing."—Philadelphia Public Ledger.

What Grandpa Did

"Grandpa," said the children, "tell us another story about the time when you were a young man and traveled with the show."

"Well," answered Grandfather Dutton, "when I was with Nixon & Kemp's circus, forty or fifty years ago, one of my great acts was to get a boy to put an apple on top of his head, and then I would stand ten paces away and shoot a rifle-ball through it."

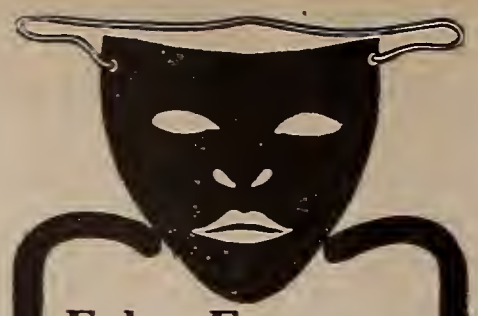
"But didn't you sometimes miss the apple and shoot the boy?"

"Not often; but it happened once in a while, of course."

"What did you do then?" they asked, breathlessly.

"Do?" answered Grandfather Dutton, shrugging his shoulders. "Why, sometimes I had to wait two or three minutes before I could find another boy, but not often. There are always plenty of boys."—Chicago Tribune.

Our new Pattern Catalogue of spring and summer styles is ready to mail, and may be had for the asking—a postal-card will bring it to you. Send for it to-day.



False Economy

consists in doing without those things which if purchased, would prove money saved. This is particularly true as concerns the farmer's wagon: A poor wagon is an expensive article. A good wagon—a

Farmers' Handy Wagon

is a money saver. The man that said, "Never mind the cost if the returns proved profitable" is a millionaire. The farmer who looks at the wagon question in the same light, will profit by it every time. But there's a question as to which wagon to buy. After you have compared the many advantages of the "Handy", you'll know which to buy. Ask your dealer or write for our catalogue. You'll make no mistake then. It's free.

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$3.50 an Acre and Up

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Unprecedented prosperity and increasing values are attracting the attention of homeseekers universally. Thousands are accepting this generous offer, and paying, in an easy way, for their own farm.

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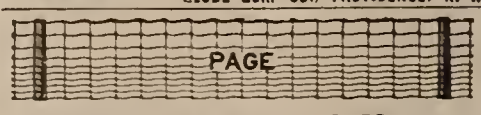

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BIG PAYING BUSINESS For MEN, WOMEN.

Write for names of hundreds of delighted customers. Make $30 to $50 weekly. Do business at home or traveling, all or spare time, selling Gray outfits and doing genuine gold, silver, nickle and metal plating on Watches, Jewelry, Tableware, Bicycles, all metal goods. Heavy plate. No experience, quickly learned. Enormous demand. No toys or humbug. Outfits all sizes. Everything guaranteed. Let us start you. We teach you FREE. Write today. H. GRAY & CO., CINCINNATI, O.

PHOTO BROOCHES 10c.

Send us any photograph you want copied and we will return it unharmed with an exact copy on one of these pretty rimless brooch-mountings for only 10cts. All our Photo-Miniatures are exact and perfect reproductions. We send this 25c. sample for only 10 cts. to introduce our goods and send you Free our large ill. price-list of photo-miniatures, jewelry, novelties. Agents wanted.

CORONA MFG. CO., Box 1275, Boston, Mass.

ON TRIAL Buy your violin from the makers with privilege of trying. Be sure of its tone—that's the satisfactory way—the way we sell

Root Violins

$3.00 to $40.00. We don't sell through dealers, but save you this profit and allow you long trial. Handsome Violin Catalog FREE.
E. T. ROOT & SONS, 347 Wabash Av., Chicago

BROWN'S BRONCHIAL TROCHES

COUGHS,

Sore Throat, Hoarseness, Bronchitis, Effectively Relieved.

Fac-Simile Signature of John Brown & Son on every box.

STEM SET STEM WIND **FREE Gold WATCH**

We give this MODERN AMERICAN MOVEMENT watch, fully warranted to keep CORRECT time, FREE to boys and girls or anyone, selling 24 pieces handsome Jewelry at 10c. each. The Case is SOLID GOLD PLATED, equal in appearance to Solid Gold Watch, guaranteed 25 years. Write today and we send jewelry postpaid. When sold send us the $2.40 and the Watch and Chain are POSITIVELY sent you by return mail.

U. S. MFG. CO.
Dept. 139 253 Roscoe Street, CHICAGO, ILL.

WANTED Reliable men in every locality to introduce our goods, tacking up show-cards on trees, along roads and conspicuous places, also distributing small advertising matter. Commission or salary $60.00 per month and expenses not over $2.50 per day. Steady employment to good men. No experience needed. Write for particulars. EMPIRE MEDICINE COMPANY, Buffalo, N. Y.

$3 a Day Sure Send us your address and we will show you how to make $3 a day absolutely sure; we furnish the work and teach you free, you work in the locality where you live. Send us your address and we will explain the business fully, remember we guarantee a clear profit of $3 for every day's work, absolutely sure. Write at once.
ROYAL MANUFACTURING CO., Box 1048, Detroit, Mich.

HULL'S ANTISEPTIC STICKING SALVE

HULL'S ANTISEPTIC STICKING SALVE

The kind you bought 40 years ago. It doesn't disappoint. Sample 1c; large stick 15c. Agents wanted everywhere.
Hull's Salve Co., Augusta, N. J.

BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

$8 Paid Per 100 for Distributing Samples of Washing fluid. Send 6c. stamp. A W SCOTT, Cohoes, N Y.

Wit and Humor

—And Bemus Spratt Led All the Rest

The bearded foreigner approached
The register at the hotel,
And took the pen, his name to write—
It seemed most difficult to spell,
For with a writhe and jerk and twitch
He wrote, "Ivan Boslovoskitch-
ivanoboffskyskollovitch."

The next guest came, and ere he wrote
He read the other name, and smiled;
It seemed a funny thing to him
That any one would so be styled;
And then he took the pen, and spelt,
"Hans Laudenslogger von Derfelt-
enschlissenhoffenobervelt."

The third guest was a dapper man,
With slender, flowing, black mustache.
He chuckled at the other names,
And then, with sweeping curve and dash,
He spread beneath the others there
His name—"Jean Paul Antoine Eclaire
Henri le Poisson Vendemaire."

Last came a man with carpet-sack
And heavy boots that bumped the floor.
"Well, what a bunch of crazy names!"
He said—his laugh rose to a roar.
"If I had such a name as that,"
He cried, "I'd change it—bet your hat!"
And then he scribbled, "Bemus Spratt."
—Chicago Tribune.

His Yearn

POOR FEEBLES (about to be operated on for appendicitis)—"Doctor, before you begin I wish you would send and have our pastor, the Rev. Mr. Harps, come over."

Doctor Cutter—"Certainly, if you wish it, but—ah—"

Poor Feebles—"I'd like to be opened with prayer."—Life.

He Saw Through Their Scheme

"Well, by gum!" exclaimed Mr. Packenham.

"What is it, Josiah?" his wife asked.

"It says here that it ain't good manners to drink your coffee out of a saucer. I'll bet that's a new dodge got up by them chaps that make the straws you have to suck through when you git things to drink at the drug-store."—Record-Herald.

The Evolution of the Folding-Bed

Mrs. De Flat—"Have you anything new in folding-beds?"

Dealer—"Only this, madam, and it really is quite a success. On arising in the morning you touch a spring, and it turns into a wash-stand and bath-tub. After your bath you touch another spring, and it becomes a dressing-case, with a French-plate mirror. If you breakfast in your room, a slight pressure will transform it into an extension-table. After breakfast you press these three buttons at once, and you have an upright piano. That's all it will do, except that when you die it can be changed into a rosewood coffin."—New York Weekly.

Exhausted the Font

Sir Samuel Sims saw sweet Sara Sampson swimming. Suddenly she seemed sinking. Sir Samuel stood stunned. Striding seaward, spurning shingle, Sir Samuel swiftly swam Saraward. Sir Samuel skilfully supported swooning Sara; swimming shoreward, Sir Samuel successfully succored Sara. Seeming somewhat shaky, Sir Samuel sampled some spirits—special Scotch. Sara saw Sir Samuel's self-sacrificing spirit; Sir Samuel saw Sara's sweetness. Sir Samuel soon sought Sara. Striding slowly, Sara sighed softly. Sir Samuel seemed speechless.

"Say something, Sir Samuel," said Sara.

"Say Sam, Sara," said Sir Samuel.

Sara, smiling shyly, softly said, "Sam."

"Sara—Sally!" stammered Sir Samuel. "Sweet Sara—sweetheart!"

Sara solemnly surrendered.

(Please stop this. We are short of excess.—Printer.)—New York News.

No Difference

Jack—"How do you like this weather?"

Old Crusty—"What difference does it make how I like it? It wouldn't be changed, no matter how much I objected to it."—Somerville Journal.

We have sent out large numbers of our Perfect Patterns, and they have given the very best of satisfaction. Our splendid designs, perfect-fitting patterns and up-to-now styles have earned for us an enviable reputation for the best patterns. Our designer is in New York, the fashion center of America, and has a national reputation as an authority on styles. Our catalogue free for the asking.

Mysterious Power Over Disease

Wonderful and Miraculous Cures Performed by a Mighty Healer.

At Last There Seems to Have Been Discovered the Secret of Long Life and Perfect Health.

(From Hearst's Chicago American.)

FORT WAYNE, IND. (Special Correspondent). In response to numerous requests, your correspondent called on the now famous Dr. James W. Kidd, to learn, if possible, the secret of the mysterious power by which he was effecting so many wonderful cures. Dr. Kidd was found at his office busily engaged in answering the hundreds of letters of inquiry which he is daily receiving from all over the world regarding his remarkable discovery.

"It is hardly necessary to say that I am busy," said the doctor. "In those files are thirty-five thousand letters that we received and answered last month, but I am always willing to explain, as far as possible, my discovery, especially to newspaper men, because I know that they will publish the information, and I want the whole world to know that there has at last been discovered a remedy which will cure every ailment."

Will it cure every case?

"It will cure every disease that I have been called upon to treat in my experience in thousands of cases, and has positively cured thousands of afflicted people who thought that they were beyond all earthly help."

What do you call your discovery?

"The Elixir of Life." Dr. Kidd here showed the correspondent a number of small egg-shaped capsules containing various colored liquids in which floated small tablets, and said: "Doctors have known and used nearly all the remedies which constitute my discovery for years, but the proportions and the method of compounding are my secret."

Do the doctors accept or use your discovery? was next asked.

"Not as a rule, because I do not care to explain or give my secret to them. It is the result of a lifetime of study and experiment, and naturally I am jealous of the honor which it brings me."

Do your patients seem to appreciate what you do for them?

"Yes, indeed. In this set of letter files are thousands of letters from grateful cured patients, and I am receiving more every day. They are the greatest source of pleasure and satisfaction to me, and the only pay that I ask for the years of study that this discovery cost me. Here are a few which are particularly interesting to me, because they are patients whom I cured two years ago, when I first made my discovery, and before I was as sure of the results as I am now. They are all enjoying perfect health now. You may publish as many of them as you like, as I have their permission."

Your correspondent copied the following extracts word for word from a few. The following from Miss Sarah Penington, Milton, Iowa, tells a thrilling story of her cure: "It does not seem possible that a person paralyzed as I was could be cured in 18 days. When you got the statement of my case I was perfectly helpless, had to have a friend write to you in my name. Now I feel that I am cured. I will always praise and thank Dr. Kidd for what he has done for me. You cured me when others had given me up to the grave."

A. C. Blair, a prominent attorney of the firm of Blair & Green, Charleston, W. Va., writes as follows: "I received your treatment for nervousness, indigestion, stomach, kidney and bladder trouble, twenty days ago. It is truly 'The Elixir of Life.' I am agreeably surprised at the wonderful result. I have suffered for more than five years, and was getting worse all the time. I have improved daily since beginning your treatment. I now feel ten years younger. Instead of having to pull myself up the court-house steps by the railing, I now run up as I did ten years ago." Ten days later Mr. Blair reports as follows: "I am restored to perfect health, sleep well, eat hearty, digestion good, kidneys and back cured, nerves in fine shape."

Your correspondent was shown hundreds of other testimonials telling of miraculous cures of apparently every disease with which man or woman was ever afflicted, and was firmly convinced that Dr. Kidd is only too modest in his claims for his marvelous discovery.

Can your "Elixir of Life" be used by patients at home?

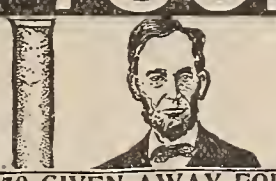
"Yes, with my instructions, and with equally as good results."

Is it true that you are giving away treatments to all applicants?

"Yes, and I expect to continue until its virtue is known all over the world. You can tell your readers that I will send every sick or afflicted person a course of treatment prepared especially for their case by mail postage paid and absolutely free. To be sure of personal attention ask them to describe their case, and address my private office as follows: Dr. James W. Kidd, 122 Baltes Block, Fort Wayne, Ind."

As the doctor asks for no money, it would seem that every reader afflicted in any way, no matter what the disease, should take advantage of this liberal offer.

$750.00 FREE



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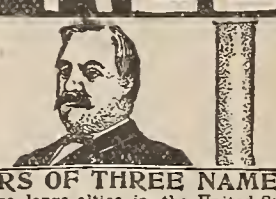

$750 GIVEN AWAY FOR CORRECT ANSWERS OF THREE NAMES.

The above two pictures of Ex-Presidents represent the names of two large cities in the United States, one located in Nebraska and one in Ohio. The center space is left blank for a third Ex-President, whose name represents a prominent city, spelled in ten letters, and the only city in the U. S. the people are not allowed to vote. If you can GIVE THE NAMES OF THE THREE CITIES, mail them to us with your name and address plainly written. If they are correct, YOU WILL RECEIVE a letter from us, which may entitle you to the whole or part of the $750.00, for the correct solution of above names and a few minutes of your time. You are not called upon for one cent of your money to be a participant in the AWARD OF $750.00. WE DO NOT WANT YOUR MONEY. Should more than one have correct answer, $750.00 will be paid just the same pro rata. We advertise ourselves in this liberal manner to interest you, and we will surely give away $750 00 besides valuable presents, as there are no blanks. Send your name and answer at once. A. LESLIE, Desk 425, 550 Pearl St., N. Y. City.

From Factory to Farm

NO AGENTS
NO MIDDLEMEN
Sea what it means.

14 in. Steel Beam Plow, Double Shin best that money can build, only **$9.00**

12-in. $8.75
16-in. $9.90
18-in. $12.00
Sulky Plow $25
Gang Plow $39
1000 other articles. Big Catalog Free. Special Catalogues of Buggies, Harness, Steel Ranges.

Hard Steel Castor Cultivator with Plow, $1.50 extra.

64-Tooth Lever Harrow $8.15
96-Tooth Lever " $12.45
14-in. Imp. Lister $17.75
14-in. Sulky Lister $31.65
8-ft. Rake $16.00
Sewing Machine $9.00
Best Sewing Machine Gt. equal to any $60 machine $17.50
Steel Range with Res. $19.70
Fine Top Buggy $33.50
12-16 Disc Harrow $17.00

Best Walking Cultivator, 4 shovel, $12.00. Best Walking Cultivator, 4 shovel and Eagle Claws, $15.25. Improved Riding Cultivator, 4 shovel $19.00. Improved Riding Disc Cultivator, 6 Disc, $25.00. Corn Planter, complete, 80 rods wire, $27.75. Address

HAPGOOD PLOW CO., 147 Front St., ALTON, ILL.

(Only plow factory in the United States selling direct to farmers at wholesale prices.)

SUCCESS Manure Spreader

Leads every other machine for the mechanical spreading of manure. Its superiority appears in the fact that it is a distinct improvement on the Kemp Spreader, which we still manufacture and which has been the typical Spreader for 25 years. Spreads all manures of every character and condition and all commercial fertilizers. Pulverizes and spreads evenly, thick or thin, broadcast or drills in rows, any desired quantity per acre, unloading the largest load in 3 to 5 minutes; apron automatically returns to position in the next 65 feet driven.

A SPECIAL FEATURED MACHINE

for convenience of handling and perfection of work. Notably superior in its Beater Freeing device, Direct Chain Beater Gear, Speed Regulation and Automatic Return of Apron. Positive and dependable in all movements. Simplest in gear, lightest in draft, least chance for breakage. The driver never dismounts for any purpose but controls everything from his seat. Made in four sizes and sold under strongest guarantee as to materials, workmanship and duty. Investigate fully before buying. Catalogue with valuable chapter on farm fertilizing mailed free.

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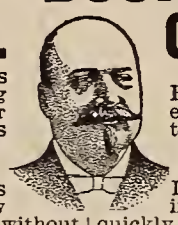
THE FARRAND ORGANS

have a **rich, clear and powerful** tone. They are HONESTLY BUILT inside and out. We make many styles, and some are cheaper than others, but they are all built the very best we know how and all have the celebrated "Farrand Tone."

If you want a GOOD organ, we would like to make a proposition to you. Send us your address now.

FARRAND ORGAN COMPANY, Stanley Ave., Detroit, Mich.

DR. COFFEE'S PROFESSIONAL BOOKS and OPINION Free



Dr. Coffee wants all readers of this paper who are afflicted with Failing Sight, Cataracts, Granulated Lids or any Eye Disease, to write him for his

80-p. Book on Eye Diseases

This book explains Dr. Coffee's method of Home Treatment. How every patient can cure themselves without visiting a doctor.

Mrs. M. A. Roberts, Windsor Station, Virginia, says: "I was totally blind in one eye with cataracts, and almost so in the other. Doctors said operation was the only hope. I heard of Dr. Coffee and used his treatment **one month and got perfect sight.**"

Everyone afflicted with Deafness, Head Noises in any form, where the ear drum is not injured, should write to Dr. Coffee for his

64-page Book on Deafness

It will be sent free. It tells how hearing can be restored by a simple method, quickly and permanently at their own home. Book tells of remarkable cures.

Mrs. Sadie Atherton, Des Moines, Iowa, says: "My niece, Nada Parker, was so blind she had to be led and so deaf we had to yell in her ears. Doctors said the case was hopeless. Dr. Coffee's Absorption Treatment **restored sight and hearing.**"

Either of these books will be sent to anyone **FREE.** They contain all the rules of health, diet, physical exercise, bathing, etc. Write for book today, specify which you want. Write

DR. W. O. COFFEE, - ⊕ - 819 Good Block, Des Moines, Iowa

Local agencies and complete repair stocks everywhere

McCORMICK HARVESTERS

International Harvester Co. of America, Chicago, U. S. A.

Lincoln Freed The Slaves

And we free the housekeeper—free her from the bondage of "Blue Monday" or Wash Day—free the clothes from dirt without rubbing and wearing—free the wash from the kitchen and have it on the line at 9 o'clock in the morning—and we prove every one of these statements free by sending you the

"1900" Ball-Bearing **FAMILY WASHER**

FREE TRIAL Freight prepaid. No money or promise of any kind required. Use it for 30 days; then if you do not wish to purchase, return it at our expense. We pay the freight both ways.

Write today for full information and Free Catalogue.

"1900" WASHER CO., 28 C Henry St., Binghamton, N. Y.

Miscellany

The World's Fair

MR. J. M. STUDEBAKER, president of the Studebaker Bros. Manufacturing Co., says in a letter addressed to Chief Willard A Smith and Commissioner A. C. Baker, of the Department of Transportation exhibits:

"My son and I desire to convey to you our sincere thanks for the courtesy shown us during our recent brief visit to St. Louis. We are interested beyond all manner of expectation. St. Louis is plainly to have a world's fair far surpassing anything the world has yet seen. Its present promise challenges the wildest flights of the imagination. No one can conceive of what has been accomplished without seeing it. The scope of the enterprise is gigantic, its detail is bewildering, and the beauty and artistic combination of buildings, grounds and water make of the place a region of enchantment. The visitor to the World's Fair at St. Louis will find himself in fairyland, in wonderland, and this without reference to what his experiences in sightseeing have heretofore been. My fear is that this impressive fact is not going to be sufficiently well known either at home or abroad. The press should blaze with the subject from this time forward."

Catalogues Received

A. L. Marshall, Urbana, Ill. Marshall's annual strawberry booklet.

Arthur J. Collins, Moorestown, N. J. Pleasant Valley nursery catalogue.

Neill & Blakeslee, Ashtabula, Ohio. Special list of desirable Ohio farms for sale.

F. W. Calvin, Washingtonville, Ohio. Price-list of Rose Comb Rhode Island Reds.

G. Camerer, Madison, Ind. Price-list of vineless sweet-potato tubers and plants.

John D. Imlay, Zanesville, Ohio. Illustrated catalogue of choice seeds and plants.

Edward Gillett, Southwick, Mass. Illustrated catalogue of hardy ferns and flowers.

Humphrey & Sons, Joliet, Ill. Illustrated catalogue of the Humphrey pure-air brooder.

E. C. Brown & Co., Rochester, N. Y. Catalogue of modern high-pressure spray-pumps.

Bushong & Co., Portland, Oreg. The Pacific Northwest Official Railway and Marine Guide.

Luther Burbank, Santa Rosa, Cal. Illustrated catalogue of three "New Shasta" daisies.

Dadant & Son, Hamilton, Ill. Circular of bee-keepers' supplies, with instructions to beginners.

M. Rumely Company, LaPorte, Ind. The Rumely annual of engines and threshing-machinery.

Kitselman Bros., Muncie, Ind. Illustrated catalogue of fence-machines and woven-wire fencing.

W. Altee Burpee & Co., Philadelphia. Pa. Illustrated circular of Scotch Collie dogs and fancy poultry.

Northrup, King & Co., Minneapolis. Minn. Illustrated catalogue of Sterling seeds for farm and garden.

Kalamazoo Stove Company, Kalamazoo, Mich. Illustrated catalogue of stoves and ranges sold direct from factory to user.

The Goulds Manufacturing Company, Seneca Falls, N. Y. "How to Spray, When to Spray, and What Pumps to Use."

If You are Well Bred

You will be kind.
You will not use slang.
You will try to make others happy.
You will not be shy or self-conscious.
You will never indulge in ill-natured gossip.
You will never forget the respect due to age.
You will not swagger or boast of your achievements.
You will think of others before you think of yourself.
You will be scrupulous in your regard for the rights of others.
You will be as agreeable to your social inferiors as to your equals and superiors.
—Orison Swett Marden, in Success.

Aside from the correct style and perfect fit of our Perfect Patterns, the system of perforations which we use simplifies a hundredfold the cutting of garments from our patterns. Any one can readily see by our patterns just how the various parts of the pattern must be laid on the goods to be cut. This is a marked superiority over other patterns. We send our Pattern Catalogue free. Ask for it.

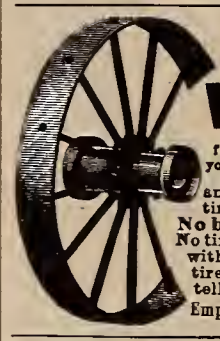
RHEUMATISM

Cured by a New Remedy

50,000 BOXES FREE

Deformity of the hands in general Chronic Articular Rheumatism.

For rheumatism, that **horrible plague,** I discovered a harmless remedy, and in order that every suffering reader may learn about it, I will gladly mail him a **Box Free.** This wonderful remedy, which I discovered by a fortunate chance, has cured many cases of **30 and 40 years' standing, among them persons of upwards 90 years of age.** No matter what your form of rheumatism is, this remedy will cure you. Do not mind if other remedies have failed, nor mind if doctors say you are incurable. Mind no one, but write me at once, and by return mail you will receive the **trial box,** also the most elaborate illustrated book ever gotten up on the subject of rheumatism. **ABSOLUTELY FREE.** It will tell you all about your case. You get the remedy and wonderful book at the same time, **BOTH FREE,** so let me hear from you at once. Address JOHN A. SMITH, 3439 Germania Bldg., Milwaukee, Wis. Send NO money OR stamps.



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any size wanted, any width of tire. **Hubs to fit any axle. No blacksmith's bills to pay.** No tires to reset. Fit your old wagon with low steel wheels with wide tires at low price. Our catalogue tells you how to do it. Address Empire Mfg. Co., Box 109H, Quincy, Ill.

$200. A MONTH

One reliable man or woman in each county as manager, to exhibit, take orders and appoint agents for Harrison's Oil-Gas Stoves for cooking and heating. Wonderful invention. Automatically generates fuel gas from kerosene oil. Miniature Gas Works. Absolutely safe. Enormous demand. Thousands sold weekly. Cheapest, cleanest, safest fuel. Customers delighted. Catalogue FREE. Write to-day.

World Mfg. Co., 5589 World Bldg., Cincinnati, O.

TELEPHONES

For Farmers' Lines

Organize an exchange in your community. Full particulars gladly furnished. Catalog free. C N 301

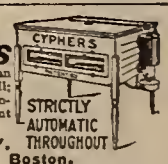
THE NORTH ELECTRIC CO.
154 St. Clair Street, Cleveland, Ohio

EVERGREENS

including Blue Spruce, Douglas Spruce and Concolar of Colorado. Forest Trees, Forest Tree Seedlings, ornamental trees and shrubs. Nursery grown on our own premises. Very hardy, and certified free from disease by State Entomologist.

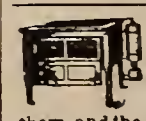
R. DOUGLAS' SONS, Waukegan, Ill.

CYPHERS INCUBATORS



Guaranteed to hatch more and healthier chicks than any other make, or your money back. Use less oil; self-regulating, self-ventilating, non-moisture. Endorsed and adopted by 36 Government Experiment Stations. Catalog free if you name this paper.

Cyphers Incubator Co. Buffalo, N. Y. Chicago, New York or Boston.



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are built on correct principles; are absolutely reliable; will last a lifetime, and the price is right too. Our mammoth big catalog tells all about them, and the chicken business. It's a corker, and a five-cent stamp will bring it to you. Address,

C. C. SHOEMAKER, Box 807, Freeport, Ill.

PETALUMA INCUBATORS

and Brooders are the oldest and most reliable machines on the market to-day. Devices purely automatic and sure. Catalogue FREE.

PETALUMA INCUBATOR CO.,
Box 74 Petaluma, Cal. Box 74 Indianapolis, Ind.

I (J. F. Siems) want everyone to know all about the

NATURAL HEN INCUBATOR

A 200 Egg Hatcher Costs But $3. It's Cheap and Practical, and assures success to everybody. Agents Wanted, either sex, no experience necessary. Secure your territory. Catalogue and 25c Lice Formula FREE. Address, Natural Hen Incubator Co., B 62, Columbus, Neb.

LITTLE CHICKS DON'T DIE

when fed and tended right. Feed Mrs. Pinkerton's Chick Food and make good profits. Write now for free catalogue on chick raising and learn too about our prize winning, pure bred birds.

ANNA L. PINKERTON CO. Box 23, Hastings, Neb.

THIS ONE SAVES YOU 1/3

Write today for Free Catalog and Poultry Book describing NEW IDEA INCUBATOR. Most durably built, best regulator, heater, lamp tanks, etc. Complete at only two-thirds cost of other high-grade machines. Write today. Address CHANNON, SNOW & CO. Box N Quincy, Ill

$1000 ECG, OR HOW MANDY PAID THE MORTGAGE FREE

a book that will help every poultry keeper solve all the problems and make poultry keeping pay. An account of actual experience, you ought to read. Free if you mention this paper. Geo. H. Lee Co., Omaha, Neb.

New Spring Styles—Garments to be Cut and Made at Home

Perfect Patterns for 10 Cents

Similar patterns retail in fashion bazaars and stores at 20 cents each, but in order to introduce FARM AND FIRESIDE into thousands of new homes, and to make it more valuable than ever to our regular patrons, we offer our line of stylish patterns to the lady readers of our paper for the low price of only ***10 Cents Each.***

Full descriptions and directions—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, *with a picture of the garment to go by.* These patterns are complete in every particular, there being a *separate* pattern for *every single piece* of the dress. All orders filled promptly. For ladies, give BUST measure in inches. For SKIRT pattern, give WAIST measure in inches. For misses, boys, girls or children, give both BREAST measure in inches and age in years. Order patterns by their numbers.

Satisfaction guaranteed or money refunded.

To get BUST and BREAST measure, put the tape-measure ALL of the way around the body, over the dress, close under the arms.

Special price of each pattern 10 cents.

Postage one cent EXTRA on skirt, tea-gown and other heavy patterns.

Send for our Pattern Catalogue. We design and cut our own patterns.

FREE **We will give any TWO of these patterns for sending ONE NEW yearly subscription to Farm and Fireside at the regular price of 25 cents a year.**

We will send Farm and Fireside One Year, new or renewal, and any ONE pattern for **Only 30 Cents**

No. 228.—SLOT-SEAM SHIRT-WAIST. 10 cents. Sizes, 34, 36, 38 and 40 inches bust.

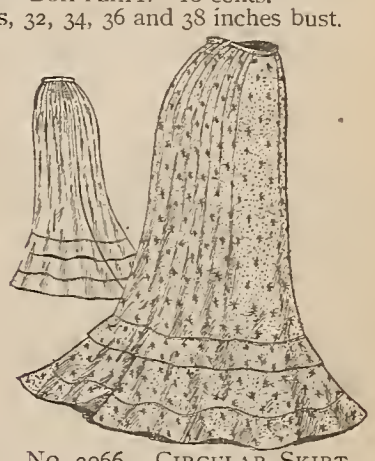
No. 2063.—BOX-PLAITED WAIST. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 2051.—LADIES' HOME GOWN. 11 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 2064.—BLOUSE WAIST. 10 cents. Sizes, 32, 34, 36, 38 and 40 inches bust.

No. 246.—SHIRT-WAIST WITH WIDE BOX-PLAIT. 10 cents. Sizes, 32, 34, 36 and 38 inches bust.

No. 4659.—TUCKED SKIRT. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.



No. 2066.—CIRCULAR SKIRT. 11 cents. Sizes, 22, 24, 26, 28 and 30 inches waist.

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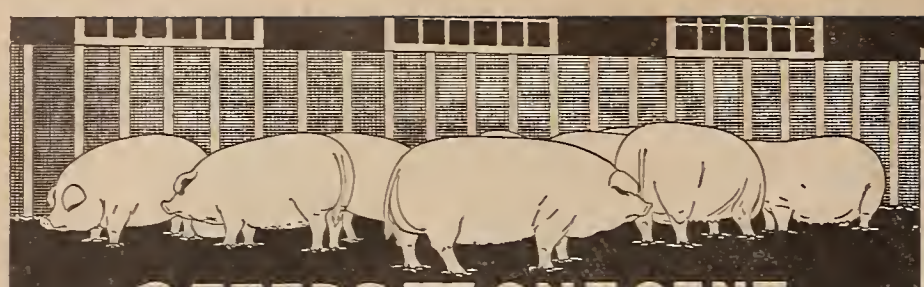

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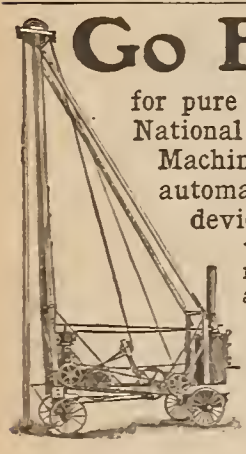

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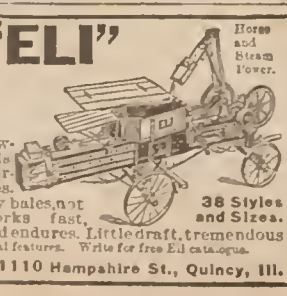

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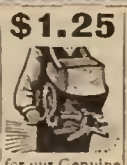

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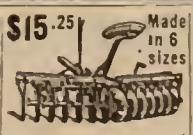

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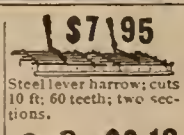

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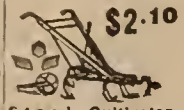

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